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Introduction to
Avestan

Javier Martínez
and Michiel de Vaan

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Introduction to Avestan

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Handwritten text in an ancient script, likely Avestan, on aged parchment. The text is arranged in approximately 15 horizontal lines. On the right side, there are several vertical annotations or marginal notes, some of which appear to be numbers or specific markers. The parchment shows signs of age, including discoloration and a large, irregular white stain at the bottom center.

Manuscript J2, 478^v, Yasna 43.6 (end) – Yasna 43.8 (beginning)

Introduction to Avestan

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Translator's Note

Like any dutiful translator, I have at all times striven to obtain an accurate and clear rendering of the original Spanish text into English, while still maintaining as much of the original phrasing and style as possible. Given the objective of this book, to introduce the facts concerning the historical and synchronic grammar of Avestan, I have prized clarity above all, and therefore have occasionally added additional explanatory clauses where I felt that a merely accurate translation did not convey the intended point. Similarly, the availability of a more extensive number and gender agreement system in Spanish often necessitated that I restore full nominal referents in many places, again for the sake of clarity.

For technical reasons, the files in which the original Spanish manuscript was composed were not usable. To produce the translation, I therefore retyped the entire book from a printed copy of the original 2001 Ediciones Clásicas edition, and typeset it using \LaTeX , in order to take advantage of direct Unicode input.

First thanks go to the authors, Javier MARTÍNEZ and Michiel de VAAN (who, incidentally, taught the first course of Avestan in which I sat, now almost five years ago), for having entrusted me with this project. Chiara BOZZONE kindly read various portions of my text, suggested better translations, and offered moral support whenever necessary. I owe a considerable debt to Jesse LUNDQUIST, who read a draft of the manuscript through the portion on nominal morphology, and thereby saved me from innumerable typographical errors.

Los Angeles, June 2013

RS

Preface

Around the second millennium BCE, at the same time that Judaism was taking shape further to the west, another monotheistic religion, impelled by the prophet Zarathustra, arose among the Iranian tribes that inhabited the area of present-day Eastern Iran and Western Afghanistan. Zarathustra incorporated the old Iranian deities into this new religion, and he reorganized them within a dualistic system characterized by the battle between Good and Evil. The Mazdayasnian creed attained dominance in the Achaemenid (559–336 BCE) and Sasanian (ca. 224–651 CE) Persian Empire. Later, following the Muslim invasion, the Mazdayasnian religion was nearly annihilated; nevertheless, in spite of everything, Mazdayasnianism survived until the present day in a couple of Iranian cities, in the west of India (Bombay [Mumbai], Gujarat), and throughout the diaspora (United States, England).

Of the totality of texts belonging to the canon, which was formed in the first half of the first millennium BCE and was successively transmitted by priests, only a tiny fraction has survived, transmitted in manuscripts since the Middle Ages. With the acquisition of a good portion of those manuscripts in the 18th and 19th centuries, the academic study of the Avestan language and the Mazdayasnian religion began in Europe.

Presently, grammars and monographs on Avestan exist in various languages, but an updated modern introduction, mainly intended for students of Comparative and Indo-European Linguistics was still lacking. In view of this gap, we first published in 2001 an *Introducción al Avéstico*, which was quite successful, and rapidly sold out. Limitations owing to the original language and the small size of the first printing made the book a *rarum*.

The start of the new series *Brill Introductions to Indo-European Languages* allows us to seize the opportunity to produce an English translation based on the *Introducción*, as many students of Avestan and Comparative Linguistics requested since the Spanish book appeared.

Considering the growing number of scholars interested in the study of Ancient Languages and Cultures, the present grammar has a dual objective. In the first place, it aspires to be a clear and concise manual of Avestan for those who wish to study the texts from a historical and cultural perspective, but it also intends to bring out the history of one of the oldest and most archaic Indo-European languages.

On the whole, the aim of this new edition was to change the text as little as possible, because of both the positive feedback received after the first edition and in order to maintain the concision and handiness of the original.

Nevertheless, we have taken advantage of this occasion to correct typos and other minor errors borne in the first edition, and we have also added some titles to the bibliography.

Academic works are always subject to revision and the present book constitutes no exception. After a period of further study, the historical grammar of the languages indeed requires new explanations as well. Real progress has been made in Avestan philology over the last decade (in particular, the results of studies made by Jean KELLENS and by Alberto CANTERA and his collaborators), and the current text has consequently been updated. In matters of historical phonology, M. DE VAAN has, in a number of instances, modified our previous views in agreement with the findings of his 2003 study on the Avestan vowels and other subsequent papers.

We would, at this point, again like to remember the teachers who introduced the study of Avestan to us: Helmut FISCHER and Ralf-Peter RITTER on the one hand, and Robert BEEKES, Alexander LUBOTSKY, and Jochem SCHINDLER on the other.

Other friends and scholars also deserve our gratitude for their advice concerning this book. Carlos JORDÁN CÓLERA (Zaragoza) revised and gave many comments on the original Spanish version. Alberto CANTERA (Salamanca) has given graciously of his time and has likewise offered many helpful comments, and Douglas FEAR (Heidelberg) was able to untighten his schedule and read the final manuscript. Lastly, we are deeply grateful to Ryan SANDELL for willingly entrusting himself to the translation of the Spanish text, and for being a patient and solicitous assistant at every stage of this work.

A considerable number of the textual materials used for the revision and updating of the present book, such as the frontispiece image of the Ms. J2, have been extracted from the corpora belonging to the TITUS Project.

Oviedo / Leiden, June 2013

JM & MdV

Symbols and Abbreviations

†	hypothetically expected form	IE	Indo-European
+	improved reading (of Geldner)	Iir.	Indo-Iranian
×	conjecture not present in mss.	impv.	imperative
#	beginning or end of a word	impf.	imperfect
◦	before or after a shortened word	ind.	indicative
≈	corresponds to	inf.	infinitive
.	syllable boundary	inj.	injunctive
<	develops regularly from	inst.	instrumental
<<	develops indirectly from	Ir.	Iranian
>	develops regularly to	Lat.	Latin
>>	develops indirectly to	LG	lengthened grade
→	replaced by	Lith.	Lithuanian
abl.	ablative	loc.	locative
acc.	accusative	m(asc).	masculine
act.	active	mid.	middle
aor.	aorist	mss.	manuscripts
Av.	Avestan	N.B.	nota bene
ca.	circa	ne(ut).	neuter
ch.	chapter	nom.	nominative
cs.	centuries	OAv.	Old Avestan
caus.	causative	OCS	Old Church Slavic
dat.	dative	OHG	Old High German
esp.	especially	OIr.	Old Irish
f(em).	feminine	OP	Old Persian
FG	full grade	opt.	optative
fn.	footnote	part.	participle
fut.	future	pass.	passive
gen.	genitive	PD	proterodynamic
Goth.	Gothic	PE	primary ending(s)
Gr.	Greek	PIE	Proto-Indo-European
HD	hysterodynamic	perf.	perfect
Hitt.	Hittite	pl.	plural
i.e.	id est	plupf.	pluperfect
id.	idem	PN	proper noun
		posp.	postposition
		ppp.	past passive participle
		pres.	present

prev. preverb
 rel. relative
 resp. respectively
 SE secondary ending(s)
 sg. singular
 Skt. Sanskrit
 subj. subjunctive

superl. superlative
 Umbr. Umbrian
 v.l. varia lectio
 voc. vocative
 w.a. without attestation
 YAv. Young Avestan
 ZG zero grade

Introduction

§1 Avestan; the Iranian Languages

Avestan is the language preserved in the sacred books of the Parsis,¹ the ensemble of which is called the 'Avesta'. Avestan is an Indo-European language and belongs to the Indo-Iranian branch of the family. In turn, Avestan (Av.), together with Old Persian (OP), is the oldest transmitted Iranian language.

Precision is necessary with respect to the term 'Iranian' because of possible confusion between the linguistic and the geographical use of the term. The Iranian languages are not geographically restricted to the borders of present-day Iran, but are also found scattered throughout the whole area of the Middle East: Turkey (Kurdish and Zaza [Zāzā]), Georgia and Russia (Ossetic), Azerbaijan (Tātī), Iraq (Kurdish), Iran (Persian, Kurdish, Balochi [Balōčī], Pashto [Paštō]), Afghanistan (Pashto, Ormurī, Parachi [Parāčī], Tajik [Tajikī], etc.), etc.

As has already been noted, the oldest attested languages of the Iranian group are Old Persian and Avestan, of which two varieties are known: Old Avestan (OAv.), also called Gathic Avestan or Avestan of the Gathas [Gāθās], and Young Avestan (YAv.). The differences between both varieties are as much chronological (diachronic) as dialectal (geographic).

There are other old Iranian languages of which we are aware, but unfortunately, nothing more than scarce and badly preserved remnants have been passed down. Such is the case for Scythian, of which we have information through Greek writers; for Median, of which direct testimony does not exist; etc.

In Figure 1, one can get a general view of the family tree of the Iranian languages. Note that the diagram does not faithfully reflect the historical reality of the languages, and that there are still obscure points regarding the synchronic position of some languages.

Neither where nor when Avestan was spoken is known with certainty, though it is possible to surmise that its area of origin was Eastern Iran, while it is thought that Zarathustra must have lived before the 10th c. BCE.

1 Followers of the Mazdayasnian religion (Zoroastrianism).

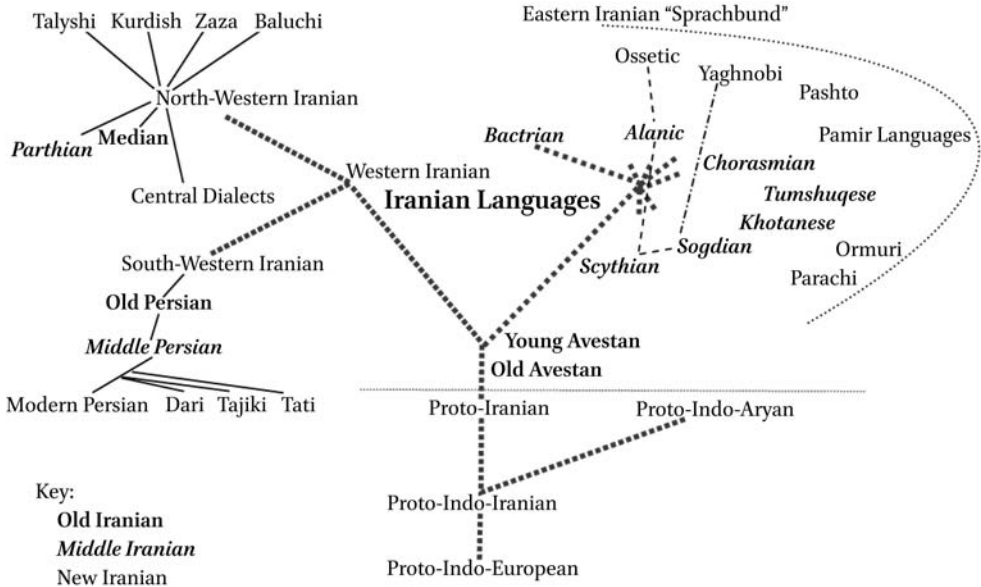


FIGURE 1 *Iranian family tree (non-exhaustive listing of modern languages)*

§ 2 The Avestan Texts

The Avestan language has been transmitted to the present day by means of manuscripts, the oldest of which dates from the 13th or 14th c. CE (!).² The monumental edition of GELDNER is preceded by a series of *Prolegomena*, in which all of the manuscripts utilized for the edition are classified in a detailed fashion, according to the traditional method of Classical Philology. The *Prolegomena* furnish some valuable information, particularly due to the fact that some of the manuscripts seen by GELDNER have since been irremediably lost, and the whereabouts of many others are unknown.³

The difficult work of reconstituting the Avestan texts rigorously combines philology and linguistics, as the results that follow from the exegesis of the

2 This is K7a.b., which BARR dates to the year 1288 or 1268; cf. GELDNER ProI. VIIa.; BARR 1944: XIII f.; and HOFFMANN/NARTEN 16. This manuscript is accompanied by a Pahlavi translation, i.e., in Middle Persian. The manuscripts that contain only the text in Avestan are termed 'pure' (*sāde*), most of which are generally much younger than those called 'impure'.

3 The Ms. Mf4 is an exceptional case, as it was not collated by GELDNER. This important manuscript has been edited in 1976 by JAMASPASA. As it happens, some of the mss. have been rediscovered: cf., for example, F1.



FIGURE 2 *The Iranian lands in antiquity*

texts, together with textual criticism, must be compared with the results from linguistics (historical and comparative). In virtue of this method, the Erlangen circle, under the guidance of K. HOFFMANN, has made considerable progress in the study of Avestan philology during recent decades. One of the achievements of HOFFMANN consists precisely in positing an archetype from which all the preserved Avestan texts ultimately derive. In effect, despite the many variants that one may observe both in the texts and in their parts, all the manuscripts retain a great uniformity, and must derive from an archetype put together in early Islamic times (see § 3). The restitution of the text that underlay the archetype (cf. § 4.2.5) is the principal task that Avestan philology undertakes.

It seems that selected Avestan texts were organized into a canon in a manner similar to other liturgical texts such as the Bible or the Veda. Nevertheless, even after the creation and diffusion of the Avestan script, as well as the compilation of the Avestan canon, the transmission of the Avesta continued to be primarily oral. Today, only a meager portion of the ancient canon is preserved. In the Pahlavi (Middle Persian) literature, many texts are mentioned that, unfortunately, have not been preserved. The archetype reconstructible for the totality of the extant Avestan manuscripts probably reflects a tradition made during the Sasanian period (ca. 224–651 CE). This collection consisted of descriptions of Zoroastrian rituals. They give the Avestan texts which are to be pronounced during the ritual and some short stage instructions to the officiating priests (given in various contemporary languages). The collection of texts that was made for the archetype is found to different degrees in various

manuscripts. Its original use was for instructing future priests in the religious schools, rather than actual use during religious ceremonies.

Within the Avestan corpus, the texts belonging to Old Av. are: (a) the 17 songs conceivably composed by Zarathustra himself (ordered into five gathas: Y 28–34, 43–46, 47–50, 51, 53), (b) the *Yasna haptanhāiti* (Y 35.2–41.6), which could also be attributed to Zarathustra, and (c) several fragments dispersed throughout the *Yasna*. The remaining texts of the corpus are categorized as Young Av.: for example, the *Yasna* (Y), *Yašt* (Yt), the *Visperad* (Vr), the *Nyāyīšn* (Ny), the *Gāh* (G), the *Sīrōza* (S), the *Āfrīngān* (A), the *Vīdēvdād* (Vd), etc. They are composed in prose with some small remnants of poetry. On the texts, cf. § 41 ff.

§ 3 Writing System: The Avestan Alphabet

Avestan is written with an alphabet created expressly for the purpose of committing the corpus to writing; the creation of this alphabet is probably to be situated between the middle of the 7th c. and the middle of the 9th c; cf. below. The Avestan alphabet is very complete and contains a detailed inventory of graphemes (it may, perhaps, be the first phonetic alphabet), whose goal was to represent with precision, in writing, a (liturgical) recited text, which would have had variant forms depending upon the speed of recitation, etc. This fact indicates that the Avestan alphabet is a deliberate creation, and does not result from a lengthy process of adoption. Indeed, the alphabet must have had a specific creator, who could equally have been a lone individual or have come from a school of recitation.

The immediate model for the Avestan alphabet is a variety of the Pahlavi script (which itself ultimately derives from the Aramaic script): Book Pahlavi, used by theologians of the Zoroastrian church for their writings. Its influence is clearly seen in the letters *a* *u* *i* *k* *x* *v* *t* *p* *v* *b* *n* *m* *r* *s* *v* *z* and *š*. Some characters, however, have been taken over from another, more archaic variety, used for a translation of the psalter, and known because they have been found in a manuscript from Turfan (7/13th c. CE): cf. *γ* *ι* *j* *ϛ* and *d* *ϛ*. The rest of the letters result either from the use of diacritics (for example, the small line *l* was abstracted from Pahl. *L* / *ō* / *ṛ* > *ō* *ṛ*, as a sign of length, and added to make the corresponding longs to *i* and *u*, i.e. *ī* *r* and *ū* *r*, while being subtracted from Pahl. *L* / *ō* / to write *o* *ṛ*) or from pure invention (*ā* *ṛ* as a ligature of *ā* + *ṛ* [*ṛ* + *i*] or *δ* in its two variants *ṛ* and *ṛ*).

The establishment of a relative chronology for the script is a complicated issue, and has been a recent topic of discussion. Until now, an inscription in

Book Pahlavi script on a sarcophagus discovered in Istanbul, whose archaeological dating demands a date no later than 430 CE, was usually adduced as important evidence. Some scholars even allowed the possibility that the creation of the script had taken place during the reign of Šābuhr II (310–379 CE).

At present, the dating of the sarcophagus has been revised, and a much later date is admitted, probably the 9th or 10th c. Recently, a new approach to the evidence provided by the Pahlavi books and other sources, like coins, points toward the existence of a Sasanian Avesta. The invention of the Avestan alphabet could accordingly be dated to around 500 AD. It is quite probable that the pressure of the Arab conquest (651 CE) acted as a catalyzing agent in the Mazdayasnian community, and the need was felt to continue the Avestan canon in a written form. The canon's redaction in writing may have materialized during the so-called "Pahlavi Renaissance" (9th c.), which attempted to set up a canonical book in direct opposition to those that the other great religions offered, and to the *Qur'an* in particular.

Despite its obvious filiation, the Avestan writing system distinguishes itself sharply from the imprecision that characterizes the Pahlavi system, in which the same sign or ligature allows for various interpretive possibilities, and vowels are not indicated (a practice inherited from Aramaic). Avestan, from the outset, assigned a specific value to each sign and marked the vowels precisely. In this regard, the Greek writing system, which was well known throughout the East, may have served as a point of reference for the creators of the Avestan alphabet.

§ 4 The Transmission

The enterprise that sought to commit the Avestan corpus to writing must have been carried out shortly after the invention of the alphabet, and would have culminated with the production of a sort of *editio princeps* of the Avesta, which is usually given the name 'Sasanian Archetype'. This unpreserved archetype establishes the beginning of Avestan's history of textual transmission. The transmission of the corpus, however, obviously begins much earlier, with the very moment of its composition. From here, it is possible to distinguish between several stages up until the time that the corpus took written form.

§ 4.1. With regard to OAv., the stages are as follows (according to HOFFMANN 1989:51, with slight modification): 1. the original language of the *gāθās* of Zarathustra, the *Yasna haptanhāiti*, and the three sacred prayers (between 1000 and 900 BCE). The region where the Old Av. texts originated is usually located in Northeastern Iran (Herat?); 2. changes due to slow recitation appear (here, the numerous non-metrical anaptyctic vowels are introduced); 3. changes due

to transmission in the hands of YAv. priests, who introduced phonetically YAv. forms into OAv. (the so-called “Young Avestanisms”); 4. an intentional alteration of the text through the orthoepic diaskeuasis, the aim of which was to establish a canonical text.

§ 4.2. Once the text of Old Av. was established, the transmission of the Old and Young Av. texts was carried out in common. The stages that affect the whole of the Avesta are the following: 1. the original language of the Young Avestan redactors; 2. the movement of the Avestan tradition around 500 CE to Persis [Fārs] in Southwestern Iran; 3. the transmission of Avestan in a theological school in Southwestern Iran (Eṣṭakhr), which is reflected through the influence of Old Persian and Median, in fanciful pronunciations that are presumably the work of semi-erudite teachers, in the composition of late (grammatically incorrect) Avestan texts, and in the incorporation of portions of texts that were transmitted in other geographical areas.

4. With this stage, the purely oral transmission comes to an end. It is traditionally thought that, in the 4th c. CE, the alphabet, with phonetic notation for Avestan, was created, and that the corpus obtained written form (the Sasanian Archetype). This chronology is presently undergoing revision, and it seems that this process took place rather in the 6th c. 5. Throughout the Sasanian period (ca. 224–651), the Avesta suffered serious deterioration because of incorrect pronunciation (the period of the vulgate). 6. Starting from the first archetype (11th c.?), hyparchetypes, which were not free of errors (cf. the regular interchange between \acute{s} \acute{s} and \check{s}), emerged. 7. Since 1288 CE, the recent manuscripts have been copied with a large number of errors and obvious corruptions; the presently existing manuscripts reflect the outcome of this work.

Phonology

§ 5 Alphabet and Phoneme Inventory

The Avestan alphabet consists of 16 vowel signs and 37 consonant signs. The fact that a considerable number of the language's phonemes are represented by multiple graphemes demonstrates that the writing system is effectively more phonetic than phonological.

§ 5.1. In Table 1, the letters of the Avestan alphabet are presented according to their place of articulation, which is the traditional practice in Indo-Iranian philology. The accompanying transliteration below each letter is that which is usually employed at present. This transliteration scheme is based on a notation established by K. HOFFMANN (1971; cf. 1975: 316 ff.), which the scientific community has accepted as the norm. Previously, different signs were used for the transliteration of some characters, such as *h* for *x*, *č* for *c*, *ǰ* for *j*, *w* for *β*, *n* for *n* and *ñ*, *š* for *š*, *ṧ*, and *š̈*, *y* for *y*, *ȳ*, and *ü*, and *v* for *v* and *uu*. Recently, other characters have been introduced into the modern transliteration system: *â*, *ǰ̇*, *ȳ̇*, *ñ̇*, *ñ̈*, *ṧ*, and *š̈*.

§ 5.2. Certain letters are found only in the manuscripts and are usually not present in the textual editions, a fact which should not take away from their importance, because some of these letters may have been part of the original alphabet of the archetype.

1. *â* appears only in ms. Pd, where it is used instead of *a* preceding *ȳh*.
2. *ǰ̇*, which scarcely occurs in the manuscripts, belongs to the original alphabet. In the manuscripts that do use it, it most often appears in the frequent final sequence *-ǰ̇ng* (cf. esp. the mss. S1 and J3; § 7.9.3), from which it is possible to deduce that *ǰ̇* could have been an unreleased consonant like *ǰ̣* (§ 11.10.2); both are the only final occlusives in Avestan.
3. *ȳ̇* (*-ȳuh-* [*-ȳh-*] / *-ȳ^hh-* < **-h_u-* < **-s_u-*) likewise belonged to the archetype and represents a labialized *ȳ*; cf. § 11.31. In the same fashion, *ȳ̈* represents a palatal *ȳ* resulting from **-h_i-* < **-s_i-*; cf. § 11.29.
4. *ñ̇* (cf. § 11.4), in the archetype, represented a palatal *n* produced before **ǰ̣*; it is thus usually found in the manuscripts preceding *ü* (< **ǰ̣*), but also before *i*.
5. *ñ̈* was likewise a constituent letter of the original alphabet, used for the representation of a voiceless *m*. Occasionally, one finds it replaced by *hm*.

TABLE 1 *The Avestan alphabet*

𐬀	𐬁	𐬂	𐬃	𐬄	𐬅	𐬆	𐬇
a	ā	ā̇	ā̈	ȧ	ä	ə	ē
𐬈	𐬉	𐬊	𐬋	𐬌	𐬍	𐬎	𐬏
e	ē	o	ō	i	ī	u	ū
𐬐	𐬑	𐬒	𐬓	𐬔	𐬕	𐬖	𐬗
k	x	á	x ^v	g	ḡ	γ	
				𐬘	𐬙		
				c	j		
𐬚	𐬛	𐬜	𐬝	𐬞	𐬟		
t	θ	d	δ	ṭ	t̄		
𐬠	𐬡	𐬢	𐬣	𐬤	𐬥		
p	f	b	β				
𐬦	𐬧	𐬨	𐬩	𐬪	𐬫	𐬬	𐬭
ŋ	ŋ̇	ŋ ^v	n	ṅ	ṇ	m	m̄
𐬮	𐬯	𐬰	𐬱	𐬲	𐬳		
ẏ	y	v	r				
𐬴	𐬵	𐬶	𐬷	𐬸	𐬹	𐬺	
s	z	š	ž	ṧ	ž̇		
				𐬻			
				h			

6. The manuscripts that come from Iran usually employ *ẏ* instead of *y*, which is used much more frequently in the Indian manuscripts. The substantial formal difference between the two signs excludes the possibility that they might have been mere variants; it may be that *ẏ* was originally employed for initial *#i* (§ 11.1.1). The two distinct graphemes could be explained by supposing that original initial *#i* was written with *ẏ*, while *y* would have, in principle, served to represent a palatal *ž*. With the passage of time, the sounds *ž* and *ž̇* were no longer differentiated. Both sounds came to be written in inlaut with *ž̇*, consequently leaving the letter for *ž̇* free; this letter then must have been used

instead of *y* by a certain Parsi community in India, whence the usage of *y* was generalized in the Indian manuscripts.

§ 5.3. The alphabet is written from right to left, and the letters are not usually conjoined, but rather are written separately. Ligatures are not normally employed, while those that do appear are sporadic and secondary by nature. The most common ones are *ša*, *šc*, and *št*.

§ 5.4. The Avestan writing system also makes use of an interpunct: the dot (·), which occurs at the end of each word or separates, in an inconsistent way, the members of compounds, without observing any difference from the first function: cf. *ərəš.vacā* ‘who tells the truth’ (Y 31.12), from the adv. *ərəš* ‘right, correctly’ and *vacah-* ‘word’; *vīspā.vohū* ‘who has all that is good’; *para.kauuistāma* ‘the best observer’ (Yt. 12.7) and its positive *parō.kauuīdām* (Yt 10.102), etc. In some instances, the dot also separates the stem and the suffix/ending in a word; cf. the superl. adj. *spəntō.tāma-* ‘the most beneficent’ (Y 37.3), the inst.pl. *drəguuō.dabiš* (Y 29.2), or the dat./abl.pl. *drəguuō.dabiū* (Y 30.11), from the stem *drəguuant-* ‘deceiver, follower of the Lie’ (≈ Skt. *drūhvan-* ‘deceptive’, from the root Av. *druj*, cf. PIE **dʰreǵh* ‘deceive’). Note that, in these cases, it is typical to substitute the vowel *a* of the first element with *ō*, the typical composition vowel, i.e., < *drəguua*^o, etc.¹

The sign ·; the function of which is to separate the Avestan text from the accompanying interlinear translation, also appears in the manuscripts (cf. ch. 1, fn. 2). One can observe some examples of punctuation in the illustration on pg. iv, extracted from ms. J2.

§ 6 Historical Phonology

Avestan in its two varieties, when taken together with Old Persian, allows for the reconstruction of a Proto-Iranian language (Ir.); the stage preceding Proto-Iranian is Proto-Indo-Iranian (also called *Proto-Aryan*), which is reconstructed through the comparison of Proto-Iranian and Sanskrit (especially the oldest phase of the language: Vedic), which is a language closely related to Iranian.

1 The original composition vowel is *a*, which is found in some isolated cases: *ustāna-zasta-* ‘with outspread hands’, *aša-cinah-* ‘seeking *aša*’. In some instances, *ā* is also found, justifiably, to judge from parallel Skt. examples: *kamnānar-* ‘with few men’; *vīspā.vohu* ‘having all that is good’ (Skt. *viśvāvasu-*). *ō*, of secondary origin, is the composition vowel of YAv., but it was successfully introduced into OAv. An *ā* also occurs as a composition vowel in a few rare instances: OAv. *manā.vīsta-* ‘found in thought’, and, consequently, is found before some endings as well; cf. § 7.9.4.

Comparison with other Indo-European languages, such as Greek, Latin, and Hittite ultimately allows for the reconstruction of Proto-Indo-European (PIE). Likewise, the history of each one of the features of the language does not consist solely of the description of the stages that the language goes through, but also of their relative chronologies. Changes, the product of the internal history of each language, are what determine the particular differences of each group, and, at the same time, of the languages/dialects that make up that group.

For the purposes of deriving the Avestan phonological system, we proceed from the following stage of Proto-Indo-European:

Vowels: *e o ē ō i u*

Consonants: p t k k̑ k^h s h₁ h₂ h₃ i̯ u̯ l r m n
 b d g g̑ g^h
 b^h d^h g^h g̑^h g^{uh}

In addition, the following combinatorial variants, or allophones, occur:

ʃ ʒ ɲ z

§7 Vowels

The Indo-European vowel system was simplified in Proto-Indo-Iranian, a condition that still holds in Proto-Iranian: the vowels *e o* (and their respective long vowels) all become *a* (and *ā* respectively), while the vowels *i* and *u* (and their respective long vowels) remain unchanged. In general, the following developments can be stated:

TABLE 2 *The Avestan vowels*

PIE * <i>e</i> * <i>o</i>	>	Iir. * <i>a</i>	>	Av. <i>a</i>	PIE * <i>ē</i> * <i>ō</i>	>	Iir. * <i>ā</i>	>	Av. <i>ā</i>
PIE * <i>i</i> * <i>u</i>	>	Iir. * <i>i</i> * <i>u</i>	>	Av. <i>i u</i>	PIE * <i>ī</i> * <i>ū</i>	>	Iir. * <i>ī</i> * <i>ū</i>	>	Av. <i>ī ū</i>

For Avestan, a vowel system very similar to that of Proto-Iranian is assumed. In addition to these vowels, Avestan also has a vowel *ə*, which sometimes functions as an anaptyctic vowel (§9), though other vowels, such as *ā*, *a*, and *ō* are found filling the same role (cf. §9.2.5).

§ 7.1. Comparison allows for the reconstruction of a vocalic system for Avestan, which one would hope to find faithfully reflected in the texts; however, the vowels in the text of the Avesta have undergone some additional changes.

For instance, it is not uncommon to encounter phenomena that result from the peculiarities of liturgical pronunciation (slow or quick chanting), introduced throughout the transmission. Some of these features may already have been present in the original language (cf. § 9).

§ 7.2. Between Old and Young Avestan, one primary difference that emerges is in the representation of final vowels. The vowels *a*, *ā*, *ə*, *ē*, *i*, *ī*, *u*, *ū*, *e*, *ē*, *o*, *ō*, are always written as long vowels in word-final position in Old Avestan, while in Young Avestan, they are always written as short vowels, except for *-ē* and *-ō*, and in monosyllabic words (cf. §§ 7.11.3, 7.13.1). Before the enclitics ^o*cā* and ^o*ci*ṭ, in Old Avestan, *i* and *u* usually shorten, while *ā* usually remains as such.

The vowels found in the text of the Avesta have direct correlates in the proto-language, or else are the products of specific phonetic developments. In the following sections, we present a list of the vowels that appear in the text of the Avesta, with the details of their respective histories.

§ 7.3. *a* derives from Ilr. **a* < PIE **e*, **o*, **n̥*, **ṛ̥*.

1. Sometimes, an *a* in the antepenultimate syllable is the product of shortening from *ā*: OAv. *caθβarasca* ‘four’ versus *caθβārō* ‘id.’ (Skt. *catvāras*); *dātaras-ca* versus *dātārō* (nom.pl. of *dātar-* ‘creator’; ≈ Skt. *dātāras*); cf. also the ending of the thematic gen.pl. *-anqm* (versus Skt. *ānām*, OP *-ānām*; the final *-ām* is bisyllabic). The same phenomenon is seen in YAv. (but not OAv.) in the abl. ending *-āṭ* preceding the preposition *haca*: *ahmaṭ haca*.

2. The Ilr. sequence **āia* sometimes becomes *aia* in Avestan (just as in the other Eastern Iranian dialects): YAv. *asaia* ‘without shadow’ (cf. Skt. *chāyā-*); *mazdaiiasna-* ‘Mazdayasnian, of Mazdā’; *raia* ‘with wealth’ (inst.sg.; Skt. *rāyā-*; but cf. gen.sg. OAv. *rāiō*; Skt. *rāyās*). Shortening of prevocalic **āi* is quite sporadic: YAv. *vaiiu-* ‘wind’ (Skt. *vāyú-*).

3. The Ilr. sequence **āua* occasionally develops to *aua* in Avestan (and in Eastern Iranian): *nauuāza-* ‘navigator’ (Skt. *nāvājā-*); Av. *ašauuan-* ‘truthful, following *aša* [truth]’ (Skt. *ṛtāvan-*).

§ 7.4. *ā* derives from Ilr. **ā* < PIE **ē*, **ō* (and the corresponding short vowels preceding laryngeals), **ṛ̥H*, **ṛ̥H* (YAv. *zāta-* ‘born’ < PIE **ǵṛ̥h₁-tó-*; Skt. *jātá-*, Lat. *gnātus*). Occasionally, *ā* is found instead of the expected *a*: 1. after a labial consonant and before *š* (< **-rt-*): YAv. *vāšəm* ‘wagon’ < **varta-*; 2. in initial syllables

(when followed by several other light syllables), one may find \bar{a} instead of a : $\bar{a}rmaiti-$ ‘right-mindedness’ (Skt. $\bar{a}r\bar{a}mati-$), $k\bar{a}uuaiias-ca$ ‘princes’ (Skt. $kav\bar{a}yas$); 3. often, in OAv., following \bar{i} or uu (i.e., following $C\bar{i}$ / Cuu): $v\bar{i}\bar{a}dar\bar{a}s\bar{e}m$ (1.sg.aor.act.ind. of $dars$ ‘see’; cf. Skt. $\bar{a}dar\bar{s}am$); $v\bar{a}r\bar{e}z\bar{i}\bar{u}\bar{a}t\bar{a}m$ (3.sg.pres.mid.impv. of $varz$ ‘carry out, do’; cf. Gr. $\bar{v}\bar{e}\bar{r}\bar{z}$); $h\bar{a}\bar{n}\bar{d}uu\bar{a}r\bar{a}nt\bar{a}$ (3.pl.pres.mid.inj. of $duuar$ ‘run’); $x\bar{v}\bar{a}nuu\bar{a}t\bar{a}$ (inst.sg. of $x\bar{v}anuuant-$ ‘sunny’).

4. Finally, mention should be made of the development PIE $*o >$ IIr. $*\bar{a} >$ Av. \bar{a} when the PIE vowel $*o$ stood in an open syllable: cf. Gr. $\pi\bar{a}\bar{t}\bar{e}\bar{r}\bar{a}$, Av. $\bar{p}itar\bar{e}m$, Skt. $\bar{p}it\bar{a}ram$, as opposed to Gr. $\delta\bar{w}\bar{t}\bar{o}\bar{r}\bar{a}$, Av. $\bar{d}\bar{a}\bar{t}\bar{a}r\bar{e}m$, Skt. $\bar{d}\bar{a}\bar{t}\bar{a}ram$. This phenomenon, which is frequently subject to intraparadigmatic regularization owing to the tendency to generalize but a single inflectional stem, is given the name of *Brugmann’s Law* or simply BRUGMANN; cf. §§ 18.1.2, 18.5, 26.15, 32.1.c (but only possibly in the case of § 32.1.c).

§ 7.5. \bar{a} reflects 1. an \bar{a} preceding ηh (< $*\bar{a}s\bar{a}$ -; cf. § 5.2.3) or η (i.e. NC ; cf. § 11.3.2); OAv. $y\bar{a}\eta h\bar{a}m$ (gen.pl.f. of the rel.pron. $ya-$; cf. Skt. $y\bar{a}s\bar{a}m$); YAv. $m\bar{a}\eta h\bar{a}m$ (acc.sg. of $m\bar{a}h-$ ‘moon’; cf. Skt. $m\bar{a}s\bar{a}m$); $d\bar{a}\eta h\bar{e}$ (2.sg.aor.mid.sbj. of $d\bar{a}$ ‘give / put’ < PIE $*deh_3$ / $*d^heh_3$, resp.); $d\bar{a}\eta t\bar{e}$ (3.pl.aor.mid.sbj. of $d\bar{a}$); YAv. $m\bar{a}z\bar{a}nt\bar{a}m$ (acc.sg. of OAv. $m\bar{a}z\bar{a}nt-$ ‘great’; cf. Skt. $m\bar{a}h\bar{a}nt\bar{a}m$); $h\bar{a}c\bar{a}nt\bar{e}$ (3.pl.pres.mid.sbj. of $h\bar{a}c$ ‘follow’).

In inflection are found: 2. final $\bar{a}\#$, which derives from the IIr. sequence $*\bar{a}s\#$;² cf. OAv. $\bar{a}\bar{e}t\bar{a}\eta h\bar{a}$ (gen.sg.f. of dem.pron. $\bar{a}\bar{e}ta-$ ‘this’); OAv. $\bar{d}\bar{a}\bar{e}n\bar{a}$ (gen.sg./nom.acc.pl. of $\bar{d}\bar{a}\bar{e}n\bar{a}$ ‘religion’; cf. the Skt. ending $\bar{a}s$ of gen.sg./nom.acc.pl. of \bar{a} -stems.); 3. the ending of the gen.du. is also $\bar{a}\#$ < $*\bar{a}s$ (cf. Skt. $\bar{o}h$; the loc.du. has $\bar{u}uo$ < $*\bar{a}u$; cf. § 10.3.4).

§ 7.6. \bar{a} is the product of 1. the IIr. sequence $\bar{a}n$ before a fricative: $x\theta fsz\bar{s}$: $m\bar{a}\theta ra-$ ‘formulation’ (Skt. $m\bar{a}ntra-$); YAv. $qz\bar{a}h-$ ‘tightness’ (Skt. $\bar{a}m\bar{h}as-$; Lat. $\bar{a}ngus-tus$; < PIE $*h_2\bar{e}m\bar{g}^hes-$); $d\bar{a}h\bar{i}\bar{s}ta-$ ‘most expert’ (Skt. $\bar{d}\bar{a}m\bar{s}i\bar{s}t\bar{h}a-$) and $\bar{d}id\bar{q}s$ (3.sg.pres.act.inj. of $d\bar{a}h$ ‘teach’, Skt. $\bar{d}\bar{a}m\bar{s}$; cf. Gr. $\bar{d}\bar{e}\bar{d}\bar{a}\bar{e}$); $q\bar{x}nah-$ ‘rein’ (cf. Gr. $\bar{a}\bar{r}\bar{h}\bar{a}$; from PIE $*h_2enk$ ‘bend’); YAv. $\bar{f}r\bar{q}\bar{s}$ ‘forwards’ (Skt. $\bar{p}\bar{r}\bar{a}\bar{n}$ < $*\bar{p}\bar{r}\bar{a}\bar{n}k-\bar{s}$); OAv. $\bar{p}\bar{a}q\bar{s}nu-$ ‘dust’ (Skt. $\bar{p}\bar{a}\bar{m}\bar{s}\bar{u}$); $\bar{v}\bar{q}\bar{s}$ (3.sg.aor.act.inj. < IIr. $*\bar{u}\bar{a}nst$ from $\bar{v}an$ ‘win, prevail’).

2 When the enclitic $\bar{o}ca$ is added, the vowel \bar{a} is maintained by analogy: gen.sg. ($m\bar{a}zd\bar{a}$ -) $m\bar{a}zd\bar{a}$ and $m\bar{a}zd\bar{a}sca$; nom.pl. ($\bar{d}\bar{a}\bar{e}n\bar{a}$ -) $\bar{d}\bar{a}\bar{e}n\bar{a}$ and $\bar{d}\bar{a}\bar{e}n\bar{a}sca$; acc.pl. ($\bar{s}\bar{a}n\bar{a}$ -) $\bar{s}\bar{a}n\bar{a}$ and $\bar{s}\bar{a}n\bar{a}sca$, etc.

An *ā* becomes *q*: 2. before a final nasal in all cases (*-qm -qn*): loc.sg. *dqm* ‘at home’; Av. *θβqm* (acc.sg. 2.pers.pron.; Skt. *tvám*); OAv. *mqm* (acc.sg. 1.pers.pron.; OP *mām*, Skt. *mām*); *cašmqm* (loc.sg. of *cašman-* ‘eye’); *nāmqm*, *nāmanqm* (acc.pl. [cf. § 11.3.3] and gen.pl. resp. of *nāman-* ‘name’; cf. Skt. *nāman-*, Lat. *nōmen*); 3. in an open syllable before a nasal in some cases: YAv. *nqma* (nom./acc.neut.; cf. above; Skt. *nāma*); YAv. *dadqmi* (1.sg.pres.act.ind. of *dā* ‘give / put’; Skt. *dād*^(h)*āmī*); but *hunāmi*; *uruuqñō* versus *uruuāñō* (both nom.pl. of *uruuan-* ‘spirit’). 4. On *ā* for *q*, cf. § 5.2.1. 5. On *q* as an acc.pl. ending in YAv., cf. § 7.9.3.

§ 7.7. *ḡ* is found in some manuscripts instead of *q*. Although it may initially seem that we are dealing with two graphic variants for the same phoneme, it is quite probable that, in the archetype, both signs corresponded to two distinct phonemes: *q* would reflect a long, nazalized *ā* (cf. *nqma* or the ending *-qm*), while *ḡ* would reflect a short, nazalized *ə*.

§ 7.8. *ə* represents **a* 1. before a nasal: *həntī* (3.pl.pres.act.ind. of *ah* ‘be’; Skt. *sānti*, Lat. *sunt*); *vazəntī* (3.pl.pres.act.ind. of *vaz* ‘lead’; cf. Skt. *vāhanti* < PIE **ueǵʰ*); YAv. *barən* (3.pl.pres.act.inj. of *bar* ‘carry’; cf. OP *abara*ⁿ; PIE **bʰer*); *ahurəm* (acc.sg. of *ahura-* ‘lord’; Skt. *ásura-*); and 2. also preceding *-uu-* (i.e., *-u-*): *suuūduuā* ‘ignorant’ (nom.sg.; Skt. *ávidvāms-*); PIE **ueǵd-* > Iir. 1**uaǵd-* ‘find’, 2**uaǵd-* ‘know’; *səuuīšta-* (superl. of *sūra-* ‘powerful’; Skt. *śáviṣṭha-*); *təuuīšt-* ‘might’ (Skt. *táviṣṭ-*); *kəuuīna-* PN versus nom.sg. *kauuā* (cf. Skt. *kaví-* ‘seer’); YAv. *rəuuī-* ‘swift’ (< **rayū-*; cf. Skt. *ragh-ú-*, Gr. *ἔλαχός*; PIE **h₁lengʷh-*).

3. *a* is, however, almost always preserved if (a) *ii* (*ī*) or *uu* (*ū*) precedes it:³ *xšaiiamnō* (nom.sg. pres.part.mid. of *xšā* ‘possess, be owner of’; cf. Skt. *kṣáyati*); YAv. *auruuantəm* ‘runner’ (acc.sg.; Skt. *árvant-*); YAv. *bauuantəm-ca* (acc.sg. pres.part of *bū*; Skt. *bhū*); *a*, though, is never preserved as such before a final nasal *-aN#*, even when *ii* or *uu* precedes it: OAv. *bəṇaiiən* (3.pl.pres.act.inj. of *ban* ‘be ill’); *rāṇhaiiən* (3.pl.pres.act.inj. of *rah* ‘move away from’); or (b) before nasal followed by *ii*: OAv. *kainibiūō*, YAv. *kainiūō* (dat.pl. and acc.pl., resp., of *kainīn-* ‘girl’; Skt. *kanyā*; Gr. *καινός*?) OAv. *spaniā*, YAv. *spainiianhəm* (nom.sg. and acc.sg., resp., of the comparative *spainiiah-* to *spənta-* ‘sacred’); *mañiiuš* ‘spirit’ (nom.sg.; Skt. *manyú-*). Even though *a* before a nasal always became *ə*, YAv. has sometimes restored original *am* and mostly restored original *an*

3 The pres.part.mid. *saiianəm* ‘lying’, whose short vowel is unexpected, is not to be included here, cf. Skt. *śáyāna-*.

in word-internal position, whence it was introduced into OAv.: cf. Av. *nəmah-* ‘homage’ (Skt. *nāmas-*), but Av. *manah-* ‘thought’ (Skt. *mānas-*). 4. On the original development of *a* in YAv., cf. § 7.14.4 (*a* > *ə* > *ĩ*; cf. also fn. 6 below), § 7.16.1 (*a* > *ə* > *u*). 5. On *ə* as an anaptyctic vowel, cf. § 9.2.5.

§ 7.9. *ā* is found 1. often in OAv. passages as the outcome of *a* before a nasal (but cf. § 7.8): *aniūn* (acc.sg.m. of *aniūa-* ‘other’; cf. Skt. *anyā-*), *vərəzēna-* ‘community, clan’ (Skt. *vṛjāna-*), *xʷənuuaṇt-* ‘sunny’ (*xʷan-* ‘sun’; cf. Skt. *svār-* ‘id.’), *hacēna-* ‘fellowship’ (Skt. *sacanā-*); *hacēmnā* (nom.sg.f. pres.part.mid. of *hac*; Skt. *sácate*); 2. in OAv., it reflects an *a* preceding the sequence *hm*: *āhmā* (acc.pl. 1.pers.pron.; YAv. *ahma*); in YAv., *a* is preserved (or perhaps underwent a reversion *ə* > *a*),⁴ and from there it was extended into OAv.: OAv. *mahmāi* (dat.sg.neut. of *ma-* ‘my’); *ahmaṭ* (abl.pl. of *azēm* ‘I’, Skt. *asmát*), etc.; 3. before the cluster *ṅh* < Ilr. **ns*: *māṅghāi* (1.sg.aor.mid.sbj. of *man* < **mansāi*); OAv. *vəṅghaṭ*, *vəṅghaitī* (2. and 3.sg.aor.act.sbj., resp., of *van*; cf. Skt. *vámśat*); *səṅgha-* ‘explanation’ (YAv. *saṅha-*; Skt. *śámśa-*); but not before *-ṅh-* < **-āśā-*: *man-ayhā* (inst.sg. of *manah-*; YAv. *manayha*; Skt. *mānasā*); finally, cf. *təṅg* (acc.pl.m. dem.pron.; Skt. *tán*); *aməšəṅg* (acc.pl.m. of *aməša-* ‘immortal’); *vīspəṅg* (acc.pl. of *vīspa-* ‘all’; Skt. *vīśva-*). The ending **-ans* > OAv. *-əṅg* / YAv. *-ā*: YAv. *aməšə*, *vīspə*, *puθrə* (acc.pl.); the YAv. ending *-q* results from the preservation of nasalization when *m*, *n*, *i*, or *h* preceded the vowel, while *ā* was the denasalized outcome elsewhere: YAv. *haomq*, *aəsmq*, *imq*, and from there was extended to other cases: *mazištə amq* → *mazištq amq*).

4. Likewise, *ā*, in OAv., develops from Ilr. final **-as* (Skt. *-as* > *-ah*): *tarə*^o ‘across, over’ (prev.; YAv. *tarō*, Skt. *tirás*); *ciθrə* (nom.sg.m. of *ciθra-* ‘brilliant’; Skt. *citrá-*); *mā* (nom.sg. of *ma-*); *parə* ‘beyond’ (adv.; YAv. *parō*, Skt. *parás*); *sarə* (abl.sg. of *sar-* ‘union’); *hazə* (nom.sg.neut. of *hazah-* ‘power, dominion’; Skt. *sáhas-*); *və* (gen.pl. encl. of 2.pers.pron.; Skt. *vas*); in YAv., the same final sequence also resulted in *-ə*, but was replaced by *-ō*, which was in turn introduced into OAv. (cf. § 7.13.1).

In some forms, YAv. preserves the old final sequence when it occurs word-internally: cf. YAv. *raocəbiū*, (OAv.) YAv. *raocəbiš* (dat./abl.pl. and inst.pl., resp., of *raocah-* ‘light’, from a nom. **raocə*); *vacəbiš* (inst.pl. of *vacah-* ‘word’; Skt. *vácas-*) from an OAv. nom. *vacə* (cf. 19.1.1). In these examples, *ā* can be interpreted as a composition vowel (cf. fn. 1 above).

4 Called *Rückverwandlung* [reversion] by analogy to some phenomena concerning Attic Greek vocalism.

§ 7.10. **e** comes from **1.** an *a* after *j*, followed by a palatal consonant or a syllable that contains *i*, *ii*, or *ě* (i.e., in a palatal environment): cf. *iθiiejah-* ‘abandonment’ (Skt. *tyájas-*); *yesnē* (loc.sg. of *yasna-* ‘sacrifice’; Skt. *yajñá-*) and its derivative *yesniia-* (Skt. *yajñíya-*); OAv. *xšaiiehī*, YAv. *xšaiieite* (2.sg.pres.act.ind. and 3.sg.pres.mid.ind., resp., of *xšā-*; Skt. *kṣáyasi*), *sṛāuuahiiēitī* (3.sg.pres.act.ind. of *sṛāuuahīa-* ‘seek fame’).⁵ This change does not occur before *r*, *uu*, or *hm*: cf. YAv. *fraiiaire* ‘morning’; *mainiiauuē* (dat.sg. of *mañiuu-* ‘spirit’); OAv. *yahmī* (loc.sg.m. rel.pron. *ya-*; contrast the gen.sg.m. *yehiūā*).

2. In YAv., *e* may also derive from the sequence *ja* that is so frequent in the gen.sg.m. of the thematic inflection: PIE **-osjo* > **-ahja* > (OAv. *-ahīia*) YAv. *-ahe* (cf. further § 11.1.1). **3.** On the YAv. development *-e#* < **-aj#*, cf. § 10.2.2.

§ 7.11. **ē 1.** results from the *gathacization* of the YAv. sequence *-e#* < **-aj* (cf. 10.2.2), which, in OAv., should have been *-ōi* (and indeed is, almost always). **2.** It is encountered in OAv. in some outcomes of the Ilr. diphthong **aj*: *vaēdā*, *mruiīē* (< **mruūaj*; cf. 10.2.3); **3.** it also appears in monosyllables ending in *-e* in OAv.: *tē* (nom.pl.m. dem.pron. *ta-*; contrast *aēte*; Skt. *té*, Gr. *τοί*).

§ 7.12. **o 1.** comes from an *a* after *m*, *p*, or *u*, followed by a syllable that contains *u* (not *ū*): *mošu* ‘soon’ (Skt. *makṣū*); *pouru-* ‘much’ (Skt. *purú-*, OP *paruv*); *vohu-* ‘good’ (Skt. *vásu-*). If the intervening consonant is palatal, dental, or labiodental, there is no rounding: *pasu-* ‘livestock’ (Skt. *paśu-*); YAv. *maδu-* ‘wine’ (Skt. *mádhu-*, Gr. *μέθυ*). **2.** *o* also occurs in some outcomes of the Ilr. diphthong **au*; cf. § 10.3.1.

§ 7.13. **1.** *ō* corresponds to Ilr. final sequence **-as#*. This final sequence became *-ā* in OAv. and *-ā* > *-ō* in YAv. (cf. § 7.9.4), whence it was introduced into OAv., supplanting the original *-ā* almost everywhere: YAv. *vacō* (nom.sg.neut. of *vacah-*); *kō* (nom.sg.m. interr.pron. *ka-* ‘who?’); *vō* (dat.gen.pl. encl. of the pers.pron.2. *tuuām* ‘you’; Skt. *vas*); contrast OAv. *vacā* (also *vacō*), *kā*, *vā*. **2.** *ō* appears as the usual composition vowel (cf. § 5.4. and fn. 1 above): *parō.kauuūōdam*, *drəguuō.dabīš*. **3.** In OAv., *ō* sometimes represents an *ā* or *ə* before the sequence *rC*: OAv. *cōrəṭ* (3.sg.aor.act.inj. of *kar* ‘make, do’; << **car-t*; cf. Skt. *á-kar*); OAv. *θβōrəštār-* ‘creator’ (Skt. *tváštār-*; Ilr. **tvarc-* ‘shape, create’); OAv. *dōrəšt* (3.sg.aor.act.inj. of *dar* ‘hold’; also OAv. *dārəšt*; < **d^hār-š-t*). **4.** *ō* also appears in some outcomes of Ilr. **-au*: *gātuuō*, *haētō*; cf. § 10.3.4.

5 In the course of transmission, forms such as *ašā.yecā* (dat.sg. < *ašāja-cā*) also appear. On the thematic dat.sg., cf. § 19.1.7.

§ 7.14. On the whole, *i* and *ī* are preserved as such in most cases, though, in a number of contexts, *i* is lengthened to *ī* and *ī* can be shortened to *i*. *i* usually appears 1. as the reflex of Ilr. **i*; Av. *hiš.haxti* (3.sg.pres. act.ind. of *sac* ‘follow’; Skt. *siṣakti*); *pitum* (acc.sg. of *pitu-* ‘food’; Skt. *pitú-*); 2. as the shortened outcome of Ilr. **ī* before *uu* (Av. *piuuah-* ‘fat’, Skt. *pívās-*); 3. as the YAv. outcome of the development of *a* (< **a*; cf. § 7.8) after *í*, *c*, *j*: YAv. *yim* (acc.sg.m. rel.pron. *ya-*; < **īam* < **īam*; OAv. *yām*); YAv. *yima-* PN (OAv. *yāma-*, Skt. *yamá-*); YAv. *drujīm* (acc.sg. of *druj-* ‘Lie’; OAv. *drujōm*); YAv. *haciṅte* (3.pl.pres.mid.ind.; Skt. *sácante*);⁶ for the conditions on the preservation of *a*, cf. § 7.8.3.

4. In isolated cases, and in a close relationship with the position of the accent, *i* can also come from the vocalization **a* of a Proto-Iranian laryngeal phoneme **H*, in turn deriving from the PIE laryngeals **h*₁₋₃: cf. YAv. nom.sg. *pita* << Proto-Av. **pHtár*, influenced by the accent of the voc. *pátar*, versus the OAv. dat.sg. *fədrōi* < Proto-Av. **pHtraṣ*. 6. On *i* as a product of epenthesis, cf. § 8.1; on anaptyctic *i*, cf. § 9.2.5.

§ 7.15. *ī* usually reflects Ilr. **ī*. It renders lengthening of short **i* in the following environments: 1. after *u*, *uu*, *ŋ^vh*, and *x^v* in an open syllable: *x^viti-* ‘well accessible, accessibility’ (*hu+i-ti-*); *āuuīšīia-* ‘apparent’ (from the adv. *āuuīš*; Skt. [**āviṣiya-*] *āviṣiya-*); *tāuuīšī-* ‘strength’ (Skt. *táviṣī-*); contrast *əuuīsti-* ‘not finding’ (from *vid* ‘find’ [cf. § 7.8.2]; Skt. *ávitti-*); *tāuuīš-cā* ‘brutality’; *səuuīšta-* ‘most powerful’ (superl.; Skt. *sáviṣṭha-*), YAv. *stāuuīšta-* ‘biggest’ (superl.; Skt. *stháviṣṭa-*). *ī* also reflects **i* and **īa* (the latter only in YAv.) 2. before final *-m#*: YAv. *axtīm* (acc.sg. of *axti-* ‘pain’); *dqmīm* (acc.sg. of *dqmi-* ‘founder’); YAv. *paitīm* (acc.sg. of *paiti-* ‘lord’), YAv. *haiθīm* (acc.sg. of *haiθīia-* ‘real’; Skt. *satyám*); 3. as part of the outcome of the sequence **ins*: *gairīš* (acc.pl. of *gairi-* ‘mountain’: < **iNs*); OAv. *cīšmahī*, YAv. *cīšmaide* (< **ci-n-s^o*; 1.pl.pres.act.ind. and mid., resp., of *ciš* ‘gather’ < PIE **k^ueṣ*; Lat. *cūrāre*); 4. in general, in the ending of the inst.pl., *-bīš*; 5. consistently in the preverb *vī* ‘separately, dis-’ < **vi*. 6. Sometimes, **i* is lengthened in open, mainly word-initial, syllables: OAv. *jīgərəzaṭ* ‘complains’ < **ji-gṛz-a-t*, YAv. *zīzana-* ‘beget’ < **zi-zan-a-*; 7. **i* is often lengthened before *š* and *ž*: *mīžda-* ‘prize’ < **mīžda-*. 8. On the YAv. development of *a* > *a* > *ī*, cf. § 7.14.3 and fn. 6 below.

6 **īa* in the sequence **CīaN* developed to **īi* and later to YAv. *ī*. From there, it was introduced into OAv.: YAv. *ainīm* (acc.sg. of *ainīa-* ‘other’; Skt. *anyám*) beside OAv. *aniōm*, *ainīm*; YAv. *frīm* (acc.sg. of *frīia-* ‘dear’; Skt. *priyám*); OAv., YAv. *haiθīm* (acc.sg. of *haiθīia-* ‘truth’; Skt. *satyám*) beside OAv. *haiθiōm*.

§ 7.16. *u* and *ū* also largely retain their etymological distribution, though **u* is affected by lengthening more regularly than **i*. Av. short *u* can be: 1. the reflex of **u* in a closed syllable (Av. *uxšan-* ‘bull’, Skt. *ukṣán-*, *supti-* ‘shoulder’, Skt. *śúpti-*) or in a non-initial open syllable (*ahura-* ‘lord’, *tauruna-* ‘young’); 2. the reflex of **ū* before *i*: *apuiiaṅt-* ‘not deteriorating’ < **apuHiant-* (Skt. *pūyati* ‘stinks’). 3. On epenthetic *u*, cf. § 8.2; on anaptyctic *u*, cf. § 9.2.3. 4. On the YAv. development of *a* > *ə* > *ũ*, cf. § 7.17.5.

§ 7.17. *ū* usually reflects: 1. Ilr. **ū*; 2. Ilr. **u* in an open initial syllable (*būna-* ‘bottom’ < **buna-* < **budna-*; *stūta-* ‘praised’ < **stuta-*); 3. **u* after **i* (*yūkta-* ‘yoked’, Skt. *yuktá-*); 4. **u* when affected by *i*-epenthesis (*āhūiri-* ‘ahuric’ < **āhuri-*, *vəṛənūidi* ‘cover!’ < **vṛnudi*); 5. **u* and **ua* before final *-m#*: (a) *gātūm* (acc.sg. of *gātu-* ‘road’; Skt. *gātú-*); *daxīiūm* (acc.sg. of *daxīiu-* ‘country’; Skt. *dásyu-*); (b) as the YAv. outcome of the development of *ə* (< **a*; cf. § 7.8) after *u*: YAv. *tūm* ‘you’ (nom.sg. of the 2.pers.pron.; OAv. *tuuām*, Skt. *tvám*); YAv. *tanūm* (acc.sg. of *tanū-* ‘body’; OAv. *tanuuām*, Skt. *tanvām*); YAv. *θrišūm* (acc.sg. of *θrišuuā-* ‘third’); YAv. *haurūm* (acc.sg. *hauruuā-* ‘all, whole’; Skt. *sārvam*); 6. as part of the outcome of the sequence **uns*: *aidiūš* (acc.pl. of *aidīiu-* ‘harmless’; Skt. *ádyu-*); *xratūš* (acc.pl. of *xratu-* ‘intelligence’; Skt. *krātu-*); 7. *ū* also represents the YAv. outcome of final **-ans* after *u* by way of **uμəŋh* > **uμə* > **uū* > *ū*: YAv. *zrū* (gen.sg. of *zruuan-* ‘time’); YAv. *hū* (gen.sg. of *x^van-*).

§ 8 Epenthetic Vowels

The insertion of the epenthetic vowels *i* and *u* in specific contexts is a very common phenomenon in the Avestan texts. The epenthesis of *i* indicates the palatalization of the affected phonemes, while that of *u* indicates labialization. It seems that epenthesis occurs only once per word, and can coexist with anaptyctic vowels (§ 9).

§ 8.1. *i* is inserted before consonants followed by *ǰ*, *i*, or *ǰ*: *irixta-* (adj. from *ric* ‘leave’; Skt. *riktá-* < **lejk^u-*); *iθiiejah-* ‘abandonment’ (Skt. *tyájas-*); Av. *airiāman-* ‘tribe’ (Skt. *aryamán-*); *aēibiūō* (dat.pl.m. of the dem.pron. *ta-* ‘this’; Skt. *ebhýás*); *kainīn* ‘girl’ (Skt. *kani^o*); *x^vāpaiθiia-* ‘fecund’ (Skt. *svapatyá-*); *baraitǰ* (3.sg.pres. act.ind. of *bar* ‘carry’; Skt. *bhárati*); *ākəraiti-* ‘pattern, arrangement’ (Skt. *ākṛti-*); *mərəiθiū-* ‘death’ (Skt. *mṛtyú-*); *daibitā* (adv.; Skt. *dvitā*); OAv. *daibišaiiaṅt-* ‘enemy’ (YAv. *θbišaiiaṅt-* < **dweis-*; cf. Skt. *dvēṣti* ≈ Gr. *δειδω*); *hacaitǰ* (3.sg.pres. mid.ind. of *hac*; Skt. *sácate*); *haxmainē* (dat.sg. of *haxman-* ‘retinue’; cf. the same ending in Skt. *-mane*); *zairimiia-* ‘house’ (Skt. *harmjā-*).

Epenthesis of *i* is not found before *ń, ř, st, řt, m*, or *hm*, nor after *ǎ* (< **aN*). The enclitic *°ca* prevents the epenthesis that endings in *ĩ* and *ě* induce: *drāguuataē-cā* (dat.sg.m.) versus *drāguuāite; jāṅghati-cā* (3.sg.) versus *sāṅghaitī*.

§ 8.2. **u** appears exclusively before *ru* and *ru:* *pourūš* (acc.pl. of *pouru-* ‘much’); Skt. *purú-*; YAv. *dāuru-* ‘wood’ (Skt. *dāru-*); *hauruuatāt-* ‘wholeness’ (Skt. *sarvātātī-*). In some cases, metathesis together with a later epenthesis is at work: *uruuata-* ‘law’ (*uruu /ru/* < **ur*; Skt. *vratá-*); *uruuādah-* ‘happiness’ (cf. Skt. *vrādh*).

The sequence **ruǎ* has a special development in YAv., namely, the *u* was lost, though it left a trace through epenthesis, which affected the preceding vowel or created a diphthong, and thus permitted the later epenthesis with *i*: YAv. *paoiriia-* ‘first’ < **pauriia-* < **paruiia-* > OAv. *pa(o)uruia-*; *brātūriia-* ‘cousin’ < **brātauriia-* < **brātāruia-* (Skt. *bhrātṛya-*); *tūriia-* ‘uncle’ < **p(ə)turia-* < **(p)tāruia-* (Skt. *pitṛya-*).

§ 9 Anaptyctic Vowels

Frequent instances of anaptyctic vowels, also referred to as *svarabhakti*, occur in the text. Anaptyctic vowels arise in clusters of occlusives, thus facilitating the liturgical recitation. In addition, most of the time, they have been introduced by different schools in the course of transmission (cf., for example, §§ 4.1.2, 4.1.3). The vowel *ə* after *r* is purely phonetic (i.e., it is neither present in a word’s underlying form, nor inserted through any phonological process). Anaptyctic vowels are metrically irrelevant.

§ 9.1. One may speak of several different anaptyctic vowels (*ā, a, o, i*), though the usual one, which appears in the majority of cases, is *ə*: YAv. *dāmāna-* ‘house’ (Skt. *māna-*); *xʷafəna-* ‘dream’ (Skt. *svāpna-*); *fəδrōi* (dat.sg. of *ptar-* ‘father’; < **pHtraǐ* > Skt. *pitṛé*); *haxəmə* (nom./acc.sg. of *haxman-*); *θβōrəstar-* (Skt. *tvāṣtar-*; cf. § 7.13.3); *nəraqš* (acc.pl. of *nar-* ‘man’ < **nərNš*); *ərəzu-* ‘straight’ (Skt. *ṛjū-*); *darəθra-* ‘support’ (Skt. *dhartrá-*); *darəsəm* (1.sg.aor.act.inj. of *dars* ‘see’; cf. Skt. *dársam*); two cases that have already been mentioned in which anaptyxis combines with epenthesis are *ākərəiti-* (§ 8.1) and *mərəiθiui-* (§ 8.1).

Final *-r* usually appears as OAv. *-rə* and YAv. *-rə*: *vadarə* ‘weapon’ (neut.; Skt. *vādhar-*); *huuarə* ‘sun’ (stem *xʷan-* neut.; Skt. *svār-*).

§ 9.2. In effect, the rest of the vowels are usually employed much less frequently: sometimes seen are 1. an *a*: *starēm-ca* (gen.pl. of *star-* ‘star’; v.l. *strēmca*; Skt. *star-*); *śūiaoθana-* ‘act, deed’ (v.l. *śūiaoθəna-*; YAv. *śūiaoθna-*; cf. further § 11.23); *varatā* (3.sg.aor.mid.inj. of *var* ‘choose’; metrically disyllabic; but *fra-uuaratā*). Anaptyxis combines with epenthesis in *daibitā* (§ 8.1). In some even rarer cases, the following vowels appear: 2. *ā*: OAv. *dējāmāspa-* PN (YAv. *jāmāspa-*); 3. *u*: *bərədubiō* (dat.pl.); YAv. *surunaoiti* (3.sg.pres.act.ind. of *sru*); 4. *ō*: *θβarōzdūm* (2.pl.aor.mid.inj. of *θβars* ‘shape’; versus *θrāzdūm* from *θrā*); *garōbiš* (inst.pl. of *gar-* ‘song’); 5. *i*: *azdibiš* (inst.pl. of *ast-* ‘bone’; v.l. *azdabiš*); *mazibiš* (inst.pl. of *maz-* ‘great’); YAv. *ni-sirinaoiti* (3.sg.pres.act.ind. of *sri* ‘lean’).

§ 10 Diphthongs

As a result of the changes of PIE **e* and **o* to Ilr. **a*, and of PIE **ē* and **ō* to Ilr. **ā*, Indo-Iranian possessed only four diphthongs: two with a short vowel, **ai* and **au*, and two with a long vowel, **āi* and **āu*. In the Avestan writing system, these diphthongs are not represented by their own graphemes, but their various outcomes are reflected, rather, by the combinations of vowel signs. In this way, the phonetic details are rendered.

The Ilr. diphthong **ai* occasions two distinct outcomes, depending upon the position in the word in which it is found. Although it is possible to systematize these outcomes, unexpected correspondences are found at times.

§ 10.1. The spelling *aē* represents 1. the outcome of the Ilr. diphthong **ai* in (a) initial position: *aēša-* ‘search’ (Skt. *éśa-*); *aēšəma-* ‘ire’ (cf. Skt. *íśyati*, Gr. οἶμα, Lat. *īra*); YAv. *aēsma-* ‘firewood’ (< **aižma-* < **aiž^hma-*; cf. Skt. *idhmá-*); or (b) in an open syllable: *vaēdā* 1./3.sg.perf.act.ind. of *vid* ‘know’ versus 2.sg. *vōistā*; cf. another example below § 10.2.1.⁷

2. *aē* is likewise the outcome of the group **aiā* before a nasal, by way of the possible development > **aiā* > **āi* > *aē*: OAv. *aēm* (nom.sg. of *ima-* ‘this’; also OAv. *aiām*, Skt. *ayám*); *vaēm* (nom.pl. of *azəm* ‘I’; Skt. *vayám*); *gaēm* (acc.sg.

7 *ōi* is frequently found instead of *aē*: OAv. *cōiθaṭ* (3.sg.aor.act.sbj. of *cit* ‘notice’); *cōišəm* (1.sg.aor.act.inj. of *ciš*); *dōišā* (1.sg.aor.act.sbj. of *dīs* ‘show’); *mōiθaṭ* (3.sg.aor.act.sbj. of *miθ* ‘leave’); YAv. *būiδiūōmaiḍe* (1.pl.pres.mid.opt. of *bud* ‘sense’; cf. Skt. *bhāvemahi* of *bhav^h*; versus 3.sg. *būiđūāēta*; cf. Skt. *bhāveta*); OAv. *vaocōimā-ca* (1.pl.aor.act.opt. of *vac*; cf. Skt. *bhāvema*; versus OAv. *apaēmā* to *āp*, or *hanaēmācā* to *han*).

of *gaiiā-* ‘life’; Skt. *gáyam*); YAv. *bərəjaēm* (1.sg.pres.act.inj. of *barj* ‘greet’); YAv. *vi-dāraēm* (1.sg.pres.act.inj. of *dar* ‘hold’).⁸ The YAv. form *raēm* (acc.sg. of *rāii-* ‘wealth’; < **reh₃i-*; cf. Skt. *rayim*) falls under the preceding development: **raïm* > **raim* > *raēm*.

§ 10.2. The spelling *ōi* reflects the outcome of the IIr. diphthong **ai* 1. in a closed syllable: YAv. *vōiynā-* ‘wave’ versus *vaēya-* ‘strike’ (Skt. *véga-*); 2. in final position in OAv.: *narōi* (dat.sg. of *nar-* ‘man’; YAv. *naire*, Skt. *nāre*); *fādrōi* (dat.sg. of *ptar-* ‘father’; YAv. *piθre*, Skt. *pitṛé*);⁹ in this position, YAv. shows *-e* (except in *yōi* and *maidūiōi*), which was in turn (re)introduced into OAv. (§ 7.11.1).

3. Some cases, such as OAv. *mruiiē* (1.sg.pres.mid.ind. of *mrū*), OAv. *tanuiiē* (dat.sg. of *tanū-*), and YAv. *uiie* (nom.du.f. of *uba-* ‘both’; OAv. *ubē*), exhibit a phonetic development **-uaj* > **-uaj* > OAv. *-uue* > YAv. *-uiiē*, which was in turn introduced into OAv.

§ 10.3. The spelling *ao* represents 1. the outcome of the IIr. diphthong **au*: OAv. *aojah-* ‘strength’ (Skt. *ójas-*; cf. Lat. *augēre*); *aošah-* ‘burn’ (cf. Skt. *oṣati*, Gr. εὔω, Lat. *ūrō*); *raocah-* ‘light’ (Skt. °*rocas-*, Gr. λευκός, Lat. *lūx*; < PIE **leuk*); *sraotū* (3.sg.aor.act.impv. of *sru*); *mraotū* (3.sg.pres.act.impv. of *mrū* ‘speak’); 2. in some cases, YAv. *ao* reflects a recent (non-original) sequence *au*: YAv. *paotriia-* ‘first’ (§ 8.2; OP *paruviya-*); YAv. *aoi* (variant of *auui*, also YAv. *aīβi*, OAv. *aibī*, Skt. *abhī*).

3. *ao* is likewise the outcome of **aua* before a nasal, by way of a possible phonetic development **aua* > **auu* > **au* > *ao*: *naoma* ‘ninth’ (Skt. *navamā-*); YAv. *abaom* (1.sg.impf.act.ind. of *bū*; Skt. *ābhavam*); YAv. *mraom* (1.sg.pres.act.inj. of *mrū*; Skt. *ābravam*).

4. In final position, the IIr. diphthong **-au* becomes *-uuō* in the majority of cases: YAv. *daǰhuuō* (loc.sg. of *daǰhu-* ‘country’; < **dah₃ia-*); OAv. *huuō* ‘that’ (OP *hauv* < **hau*); YAv. *huxratuuō* (voc.sg. of *huxratu-* ‘intelligent’; Skt. *sukrato*). In some cases, **-au* resulted in *-ō*: YAv. *zastaiiō* (loc.sg. of *zasta-* ‘hand’); YAv. *vaiiō* (voc.sg. of *vaiiu-*; Skt. *vāyo*); YAv. *haētō* (loc.sg. of *haētu-* ‘bridge’). It is likely that **-au* underwent monophthongization to *ō* (parallel to the change of **-ai* to

8 In contrast, the forms of the 3.pl. in **-aiān* are transmitted as *-aiān*: *bərəjaiān*, *vi-dāraiān*, etc.

9 *aē* is found instead of *ōi* in some words: YAv. *maēsma-* ‘urine’ (*maēza-* ‘id.’; cf. Gr. ὀμείχω; < **h₃meiǵh-*); OAv. °*naēstar-* ‘slanderer’ (from *nid*: cf. § 10.5.1); YAv. *raēθβa-* ‘clump’ (and its denominative); *raθaēštā-* ‘warrior’ (and *raθōištā-*; Skt. *rathēṣṭā-*); YAv. *pairi.uruuāēštā-* ‘he who best destroys’; *sraēštā-* ‘most beautiful’ (Skt. *śréṣṭha-*); OAv. *hamaēstar-* ‘despoiler’ (from *miθ*).

-e, cf. § 10.2.2), which later diphthongized in [uō] (written -uuō) in many forms, though not after -i-.

§ 10.4. The spelling **əu** represents, as a general rule, the outcome of the Ilr. diphthong **au* before -š#: cf. the gen.sg. forms *gəuš*, *mañiiəuš*, OAv. *daχiiəuš*, YAv. *dařhəuš*. In YAv., final -aoš (*diiəoš* [from *diiəuu-*], *draoš* [from *dāuru-*], *rašnaoš*) is more frequent and probably results from restoration of *-*au-* in the *u*-stems. Final -aoš was also introduced in OAv.: **mərəiθiiəoš*; conversely, OAv. final -əuš expanded into YAv.

§ 10.5. The spelling **ai** represents 1. the Ilr. diphthong **āi*: OAv. **āiš* (3.sg.aor.act.ind. of *iš* ‘desire’; cf. Skt. *aiṣīt*); OAv. *dāiš* (2.sg.aor.act.inj. of *dis* ‘point’; < **dāi*ć-š-s < **dēi*ķ-s-s); YAv. *nāismī*, *nāist* (1.sg.act.ind, 3.sg.aor.act.inj. of *nid* ‘insult, reproach’);

2. the sequence *āi* before a nasal can be the result of **āia*, by way of a possible development > **āi*ə > **āii* > *āi*: YAv. *gāim* (acc.sg. of *gāiia* ‘step’; Skt. *gāyā-*); OAv. *humāim* (acc.sg. of *humāiia-*; Skt. *sumāyā-*). On **āia* > *ai*, cf. § 7.3.2.

3. Note that epenthesis with *i* after *ā* does not differ graphically from the original diphthong *āi*: *drəguuāite*.

§ 10.6. The spelling **āu** represents 1. the Ilr. diphthong **āu*: YAv. *gāuš* ‘cow’ (Skt. *gāuḥ*); *xšnāuš* (3.sg.aor.act.inj. of *xšnu-* ‘welcome’); *vanhāu* (loc.sg. of *vohu-*); **xratāu* (loc.sg. of *xratu-*; Skt. *krātau*).

2. *āu* is likewise the result of **āua* before a nasal, by way of a possible phonetic development > **āu*ə > **āuu* > *āu*: YAv. *nasāum* (acc.sg. of *nasu-* ‘cadaver’); cf. further YAv. *ašāum* (voc.sg. of *ašauuan-*; Skt. *ṛtāvan-*; cf. § 11.3.3). On **āua* > **āua*, cf. § 7.3.3.

3. Epenthesis with *u* after *ā* does not differ graphically from the original diphthong *āu*: *dāuru-* (Skt. *dāru-*, Gr. *δόρυ*).

§ 11 Consonants

The system of consonants reconstructed for Indo-European (cf. § 6), in its history leading up to Avestan, has undergone a considerable number of changes, which have completely disfigured the original system. These changes are in part due to the developments of the separate phonemes on their own, and in part to the specific developments of groups of two or more consonants. The comparison of the Iranian material with that of Indo-Aryan allows, again, the reconstruction of an Indo-Iranian consonant system.

In consonantism, some notable differences exist between OAv. and YAv., for example, as regards the preservation of BARTHOLOMAE clusters (§ 11.11.1), fricativization (§ 11.11), etc.

The consonants of Iranian may be classified into 1. sonorants (semivowels and liquids); 2. nasals; 3. occlusives; 4. fricatives; 5. sibilants. The consonants maintain, with some variation, a similar organization in Avestan (where further new fricatives have arisen).

§ 11.1 The Semivowels: *i*, *u*

1. The PIE sonorant $*i̯$ is maintained as such in Indo-Iranian and in Avestan as well, where it is represented by y (y) at the beginning of the word and by ii word-internally. It has already been pointed out above that the letter y \subset was probably, from the outset, intended to graphically represent initial $\#i$, while in the Indian manuscripts y ro , which would be the letter corresponding to the palatal fricative \acute{z} (< Ir. $*j̄i$), was employed.

Medial i often disappears before e (cf. § 7.10): Av. *vahehīš* (nom.pl.fem. of the comparative *vahiiah-* to *vohu-*; < $*uahiēhī-$; Skt. *váśyasīh*); the YAv. ending of the dat.sg. of i -stems: $-āe$ < $*ajai$ > Skt. $-āye$, OAv. $-ōiiōi$; also in YAv., the ending of the thematic gen.sg.masc. $-ahe$ (but OAv. $-ahiiā$ § 7.10.3).

2. The PIE sonorant $*u̯$ is maintained as such in Indo-Iranian and in Avestan as well, where it is written as v at the beginning of the word and as uu word-internally.¹⁰

3. The distinct graphic values of the semivowels according to their position in the word necessarily reflect distinct pronunciations. It is quite probable that, in initial position, the semivowels could have begun to develop into voiced fricatives (as in a prestage of Modern Persian: j < $*i$ and b < $*u$), while in medial position, i and u would have reflected ii and uu , respectively: Av. *friia-* 'dear' (Skt. *priyá-*); YAv. *druua-* 'hale, steadfast' (Skt. *dhruvá-*). The orthographic conventions of Avestan (cf. § 7.2) further indicate that YAv. *jiia* 'bowstring' (Skt. *jyá-*) and *kuaa* 'where' (Skt. *kvà*) must be disyllabic (in virtue of having $-ā\#$).

These changes to $*i̯$ and $*u̯$ must have taken place in western Iran, most likely influenced by Old Persian, and are commonly considered to be present in the archetype. In fact, in Old Persian, post-consonantal semivowels are written with iy and uv : cf. Av. *ahiiia-*, OP *aniya-*, Skt. *anyá-* < $*anija-$; Av. *hauruua-* OP *haruva-*, Skt. *sárva-* < $*sarua-$. However, this Old Persian phenomenon

10 ii and uu used to be regularly transcribed as y and v , respectively, since they mainly represent ii and uu . More on this issue in section 11.1.3.

sometimes occurs in intervocalic position as well: cf. OP *a-dāraiya*, Av. *dāraīia-* or OP *bauvatīy*, Av. *bauuaiti*.

Consequently, the spellings *īi* and *uu* in Avestan represent *ī̄* and *ū*, which would in turn come from **ī̄* and **ū*, though they may also represent an original sequence **ī̄|*ū*: OAv. *āīīāt* < **ā-ī̄āt* < PIE **^oh₁i-īéh₁-t* (prev. *ā* + 3.sg.pres.act.opt. of *i* ‘go’; cf. Skt. *iyāt*); YAv. *sraīiah-* (comparative of *sṛīra-* ‘beautiful, excellent’; Skt. *śréyas-* < IIr. **śraīH-īas-*); YAv. *gauuāstriia-* ‘pertaining to the pasture’, from **gau-ūāstriia-*.

4. The phonetic development of some phonemes and sequences of sounds has also produced non-etymological instances of *īi* and *uu*. One such example is the assimilation of *u* to *ī* in the sequences **-uuē* and **uūai*; these become *-uīē* by way of **-uūīē*: *ahuiīē* (dat.sg. of *ahu-*, Skt. *ásu-*), which comes from **ahuiē* < **ahūīē* < **ahūē* < **ahū* < **ahūaj*, following the view presented under § 10.2.3.

Another source for *uu* is the development *-b- > -uu-*, which we find in YAv. alongside the expected *-β-*: YAv. *auui* (also written *aoui* and *aoi*) and *aīβi* ‘to, towards’ alongside OAv. *aibi*, Skt. *abhī*; YAv. *uīe* (< **uūai* < **uβai*) alongside OAv. *ubē*; *auuauuaŋ* (3.sg.impf.act.ind. of *bū* < **aβaumat*; also *abauuaŋ*), etc.; *gəuruuāīia-* (to *grab* ‘seize’), Skt. *grbhāyá-*, versus YAv. *gəraβnāiti* or OAv. *həṇ-grabəm* (1.sg.aor.act.inj.); cf. further the ending of the inst.pl. in *-uūiš* < *-u-βiš*, or, likewise, some dat.pl. forms such as *nəruīō* (to *nar-*), OAv. *nəraβiūō*, Skt. *nṛbhyaḥ*; YAv. *ašauuaoiō*, OAv. *ašauuabiūō* (to *ašauuan-*). Careful examination of this phenomenon allows for the establishment of a relative chronology: the development *-β- > -u-* took place in YAv. before *i*-epenthesis took place (thus *auui* and not *†aiuui*), but after the IIr. sequence **aūi* had become *əuui* (i.e., *əuī*; cf. § 7.8.2). This new outcome is not distinguished from old *uu* in its subsequent development, as the already cited YAv. *uīe* (cf. above and § 10.2.3), versus OAv. *ubē*, demonstrates.

5. From the combination of semivowels with various consonants (especially when the consonant precedes the semivowel), a variety of articulatory changes has taken place: **nī > n̄* under § 5.2.4, 11.4; Ir. **cū > sp* under § 11.10.3; Ir. **jū > zb* under § 11.14.2; Ir. **čī > OAv. šīi / YAv. š* under § 11.23.1; Ir. **hī- > xīi-* under § 11.28; Ir. **hī- > -ŋh-* under § 11.29; Ir. **hū > x^v* under § 11.30; **-hū > η^vh* under § 11.31; etc. On the metathesis of *ur*, cf. § 8.2.

§ 11.2 The Liquid: *r*

1. The two realizations of the IIr. phoneme **r* < PIE **r* (together with that originating from IIr. **l* < PIE **l*) have produced the same result in Avestan: both come out as an *r*, though that deriving from syllabic **r* is written as *ər* (with graphic variations).

For the realization as **r*, cf., for example, Av. *raθa-* ‘chariot’, Skt. *rathá-*; Av. *vouru*^o ‘wide’, Skt. *urú-* (cf. Gr. εὐρύς); Av. *raocah-* ‘light’ (cf. Skt. *rócate* ‘shine’ and Lat. *lūx*); Av. **raērizaitē* (3.sg.pres.act.intens.ind. of *riz* ‘lick’), Skt. *rérihat* (cf. 1.sg.pres. Skt. *réhmi* and the younger *léhmi*), cf. further Modern Persian *lištan*, Gr. λείχω, and Lat. *lingō*.

For the realization as **r̥*, cf., for example, YAv. *kəṛəta-* (ppp. of *kar* ‘make, do’), Skt. *kṛtá-*, OP ⟨k-r-t-⟩ (i.e., **kṛta-* [kərta-]); Av. *əṛəzu-* ‘straight’ (Skt. *r̥jú-*); Av. *pəṛəθu-* ‘broad’, Skt. *pṛthú-*, Gr. πλατύς < PIE **pṛ̥th₂ú-*. The ə is not usually written following a *t*: *ātrəm* (acc.sg. of *ātar-* ‘fire’).

2. When the clusters *rk* and *rp* were immediately preceded by the Iranian accent, the outcomes *hrk* and *hrp*, without anaptyxis, are found: YAv. *mahrka-* ‘destruction’ (OAv. *marəka-*, Skt. *márka-* PN); YAv. *vəhrka-* ‘wolf’ (< **uórka-*; cf. Skt. *vṛka-*); YAv. *kəhrp-* ‘figure, form, body’ (< **kárp-*). In contrast, under other accentual conditions, the developments *rək* and *rəp*, respectively, are found: OAv. *marəkaē-cā*, Skt. *marká-* ‘death, destruction’. One commonly accepted theory proposes that a voiceless *r* underlies the graphic sequence *hr* of these forms.

3. Under the same conditions as in the preceding groups, the sequence *rt* does not produce the expected sequence †*hrt*, but rather š: Av. *maššia-* ‘man’, Skt. *mártīya-*; OAv. *aməšša-* ‘immortal’, Skt. *amṛta-*; *pəššanā-* ‘battle’, Skt. *pṛtanā-*. This š was probably a voiceless lateral fricative, as some (Middle) Persian borrowings from Avestan, in which *hr/hl* are written for š, seem to show.

4. The result of PIE **r̥H* > Ir. **ar* > Av. *ar* is not distinguished from the sequence *ar* < PIE vowel + **r*: OAv. *darəga-* ‘long’, Skt. *dīrghá-* < PIE **dṛ̥gh₂gʰó-* (cf. Gr. ἐνδελεχής); *fra-uuarətā* (3.sg.aor.mid.inj. of *var* ‘choose’ < **uḷh₁-tó-*; cf. Skt. *vṛ̥ṇtē*).

§ 11.3 Nasals: *n*, *m*

Nasals found in Avestan may be either etymological or may have emerged from particular sound changes (cf. below § 11.13). Depending upon the environment in which they are encountered, all the nasals also undergo minor articulatory changes that are represented in writing through specific letters of the Avestan alphabet. At times, the nasal phonemes disappear, though they leave behind nasalization as a trace.

1. As a general rule, the PIE nasals **m* and **n* are preserved in Proto-Indo-Iranian: *nāmanəm* (gen.pl. of *nāman-* ‘name’, Skt. *náman-*, Lat. *nōmen*); *nəmah-* ‘homage’, Skt. *námas-*, cf. the Gr. neut. νέμος ‘wooded pasture’ and Lat. *nemus* ‘forest’; *mraoiti* (3.sg.pres.act.ind. of *mrū*; Skt. *brāvīti* < **mléuH-ti*; cf. Russian *molvá* ‘remark, rumor’).

2. Preceding an occlusive (*t*, *d*, *k*, *g*, *c*, *j*, [*p*], *b*), the nasals are usually represented with the letter *ṛ*: *aṅtarə* ‘within’ (OP *an-ta-ra*, Skt. *antár*); *spəṅta-* ‘ben-

efficient'; *jaṅtū* (3.sg.aor.act.impv. of *gam* 'go, come'); *parəṅdi-* 'fecundity' (Skt. *púrandhi-*); *baṅdaieiti* (3.sg.pres.act.ind. of *band* 'bind'; Skt. *bandh*); *həṅkərəiti-* (derived from *ham+kar*); *jəṅghati-cā* (3.sg.aor.act.subj. of *gam*); *səṅgha-* 'explanation' (Skt. *śaṅsa-*); *paṅcā* 'five' (Skt. *pāñca*, Gr. πέντε); YAv. *rəṅj-išta-* (superl. < PIE **h₁leng^{uh}-*; cf. YAv. *rəuuī-* 'swift' and Skt. *r/lāghīyas-*); *upaskaṅbəm* 'pillar'; *frasciṅbana-* 'beam'.

Besides numerous graphic variants (especially with the sequence *mb*), exceptions to this neutralization are seen before the enclitic ^o*cā*, which usually maintains the original nasal: *uzuxšiiṅca*, *vīspəmca*, *ašəmcā*, *darəgəmcā*.

3. In word-final position, and if the same syllable began with a labial, we find *m* for original *n*: OAv. *cašməm* (loc.sg. of *cašman-*); OAv. *nāməm* (acc.pl. of *nāman-*); YAv. *ašāum* < **ašāuən* (voc.). On the nasalization of the vowel in the final syllable, cf. § 7.6. On the voiceless nasal *ṅ*, also written as *hm*, cf. § 5.2-5.

§ 11.4. The palatal nasal *ñ* is encountered in the oldest manuscripts, from which it could be deduced that this sign was already present in the archetype. *ñ* is written before *ii* (*ī*), and *i*; cf. § 5.2.4 as well. The graphic restoration of *n* for *ñ* occasionally occurs in the manuscripts.

§ 11.5. The (dorsal) nasal *ŋ* represents, on the one hand, an etymological sound that derives from **ŋ* < **ŋk* < **nk*, such as in the YAv. word *paṅtaṅ^hum* 'a fifth' < **paṅktaḥəm* (from PIE **penk^hto-*). On the other hand, *ŋ* has arisen from a development of Ir. **h* < **s*, which, as a function of its surroundings, also produced other outcomes, namely, *ḡ* and *ḡ^h*. The details concerning these phonemes are found in the paragraph dedicated to the sibilant (§ 11.19 ff.).

§ 11.6 The Occlusives

As a general rule, the inherited occlusives have been well preserved from Proto-Indo-European into Avestan, though some changes in place of articulation, conditioned by environment, are already to be seen in Proto-Iranian (Ir.); these changes have produced new sounds and articulatory series that did not exist in Indo-European or Indo-Iranian (cf. §§ 11.9, 11.12.2, and esp. 11.11 and 11.15).

§ 11.7. The phonemes that underwent the most changes in the subsequent development of the Indo-European phonological system (cf. § 6) are those that belong to the dorsal series. In the course of their development into Avestan, the velar and labiovelar series fell together in a single velar series. In virtue of this characteristic, Avestan is classified as a *satəm* language (as opposed to the

languages referred to as *centum*, such as Latin or Greek, which exhibit distinct velar and labiovelar series, and in which the palatal series has been subsumed under the velar series). In order to see the development of the three dorsal series at distinct stages of the Indo-Iranian languages, a synoptic chart with the outcomes of the primary (I) and secondary (II) palatals is given here. For details, see §§ 11.9, 11.12.2, 11.20.3, 11.24.

TABLE 3 *The PIE dorsals in Indo-Iranian*

	Indo-European	Indo-Iranian	Iranian	Avestan	Sanskrit
I	*k̑ *g̑ *g̑ ^h	*č *j *j ^h	*c *j	s z	ś j h
II	*k *g *g ^h *k ^u *g ^u *g ^{uh}	*č̣ *j̣ *j̣ ^h	*č̣̌ *ǰ̣	c j	c j h

In Common Indo-European, a difference still would have existed between the palatovelars and plain velars or labiovelars preceding the front vowels **e̊*, **i̊*. In the stage common to Indo-Iranian, the Indo-European palatovelars (I) became dental affricates, while the plain velars and labiovelars (II), already having fallen together in a single velar series, underwent a conditioned palatalization. Subsequently, the development diverges:

(a) in the Iranian branch, the dental affricates (I) lost their (pre)palatalization and remained as dental affricates [ts] and [dz], resp. In Avestan, these affricates further developed to simple sibilants (cf. the parallel development of Skt. *mátsya-* and Av. *masiia-* ‘fish’). The palatalized plain velars and labiovelars (II) became affricates. In Iranian, the loss of aspiration left only two voiced segments: *j and *j̣.

(b) In the Indo-Aryan branch (Skt.), I and II ultimately give similar outcomes (though cf. ś c): the palatalization is preserved in the voiceless and voiced series, but the aspirate is depalatalized.

§ 11.8 The Voiceless Occlusives

The Avestan series of voiceless consonants *k*, *c*, *t*, *p* has, as its immediate predecessor, the Iranian series **k*, **č̣̌*, **t*, **p*, resp. In preconsonantal position, the voiceless occlusives *k*, *t*, *p* become the fricatives *x*, *θ*, *f*, resp., though some regular exceptions, which will be appropriately detailed (§ 11.15 ff.), are detectable.

§ 11.9. Av. **k** continues both PIE **k* and **kʷ*: Av. *kā-ma-* ‘desire’, Skt. *kāma-*, cf. Lat. *cārus*, from the PIE root **keh₂*; the Av. neg.interr. *kaṭ*, Skt. *kád*, Lat. *quod* < PIE interr./indef. **kʷod*.

IE **k* and **kʷ*, when preceding a front vowel (*ē, ī*), developed to Ir. **č* > Av. *c*: the Av. encl. particle *°caṣ*, Skt. *°ca*, Lat. *°que*, Gr. *τε* (Mycenaean *-qe*) < PIE **°kʷe*; YAv. *caxra-* ‘wheel’, Skt. *cakrá-*, Old English *hweol*, Gr. *κύκλος* < PIE **kʷékʷlo-s*; YAv. *pacata* (3.sg.pres.mid.inj. of *pac* ‘cook’), Skt. *pácata*, cf. Lat. *coquō* (< **kʷekʷō* < **pekʷō*), Gr. *πέσσω* (< **pekʷ-je/o-*); cf. the synoptic chart under § 11.7.

Within a paradigm where there was variation in vocalism on account of ablaut (§ 13.2) (such that the contact of velars would alternate between the PIE vowels **ē, *ō* (> Ir. *ǎ*) and the PIE resonants **ŋ, *ŋ̥, *r, *l*), a single variant of the velar is sometimes generalized throughout the entire paradigm. For example, the root **kar* is found in the Avestan paradigm as *kar/car*, but Skt., however, has generalized the variant *kar* throughout; cf. further § 11.12.2.

§ 11.10. Av. **t** comes from PIE **t*, and Av. **p** comes from PIE **p*: Av. *ptar-*, Skt. *pitár-*, Lat. *pater* < PIE **ph₂tér-*.

1. *t* is lost before *s* (cf. § 11.11.2), but is usually preserved following *s/š* (cf. § 11.17.4). Note further the Ilr. final sequences **-nt* > Ilr. **-n* > Av. *-n*, and Ilr. **-st* > *-s*: OAv. *dadān* (3.pl.pres.act.subj. of *dā*; Skt. *dádan*); OAv. *rārəšiiqn* (3.pl.pres.act.subj. of *rah*); YAv. *barən* (3.pl.pres.act.inj. of *bar* < **bar-a-nt* > Skt. *bhāran*); YAv. *viṇḍən* (3.pl.pres.act.inj. of *viṇḍ*); OAv. *didqs* (3.sg.pres.act.inj. of *dqh* < **didāns-t*); OAv. *vqs* (3.sg.aor.act.inj. of *van* < Ilr. **uān-s-t*); Av. *āš* (3.sg.impf.act.ind. of *ah* < Ilr. **ās-t* > Skt. *ās* → *āsīt*).

2. **ṭ** appears instead of *t* in word-final position after a vowel or *r*, as well as in the YAv. sequence *ṭb-* = OAv. *db-* (§ 11.14.1). The Avestan alphabet must have been representing an unreleased occlusive using this *ṭ*: *pərəsaṭ* (3.sg.pres.act.inj. of *fras* ‘ask’); *buuaṭ* (3.sg.aor.act.subj. of *bū*); conj. *yāṭ* (Skt. *yād*); *yūšmaṭ* (abl.pl. of the 2.pers.pron., Skt. *yušmád*); *xšaθrāṭ* (abl.sg.); OAv. *cōraṭ* (3.sg.aor.act.inj. of *kar* < **kar-t*). In the form *ṭkaēša-*, the *ṭk* has arisen through the missegmentation of **aniiaṭ.kaēša-* ‘who has something different from the doctrine’ in YAv. *aniiō.ṭkaēša-*.

In forms such as OAv. *yaogaṭ* < (3.sg.aor.act.inj. of *yuy* ‘join’ < **ieuK-t*),¹¹ the sequence *-gaṭ* is not easy to interpret. It has been pointed out that in the cases with the final sequence *-gaṭ*, the *ṭ* could serve as a sort of diacritic to indicate word-final implosion. The other occlusive that is permitted word-finally is *ǰ*,

11 In word-internal position, cf. OAv. *hūxta-* (from *hu* + ppp. of *vac*; Skt. *sūktá-*); YAv. *baxta-* (ppp. of *baj* ‘apportion’).

which should also be considered as unreleased; cf. § 5.2.2.

3. **p** does not become a fricative, but rather remains as an occlusive preceding *t*: YAv. *hapta* ‘seven’; OAv. *āiiaapta-* ‘help’ (^o*āp+ta-*); *naptiia-* (derived from *napāt-* ‘grandson’), but not before the cluster *tr* (cf. § 11.10.3): *fəδrōi* (dat.sg. of *ptar-*); YAv. *nafrəδrō-* (gen.sg. of *naptar-*/[*napāt-*]; Skt. *nápāt-* and *náptar-*); OAv. *rafəδra-* ‘aid’ (from *rap*).

A *p* of secondary origin derives from the PIE sequence **k_u* > IIr. **ć_u* > Ir. **cu* that develops in Avestan (and some other Iranian dialects) to *sp*: YAv. *aspa-* ‘horse’ (Skt. *ásva-* < PIE **h₂ek_u-*).

§ 11.11 The Voiced Occlusives

The Iranian series of voiced occlusives, **g*, **ǰ*, **d*, **b* comes from the voiced and voiced aspirate series of Indo-European, and has developed into OAv. *g*, *j*, *d*, *b*, resp., while in Young Avestan, these consonants remain as voiced stops only in initial position. Otherwise, in YAv., they spirantize and become the voiced fricatives *ɣ*, *ʒ*, *δ*, *β*, resp., except following a nasal or a sibilant. The labial *β* is further lenited to *uu*, except preceding *i* or *ii*, where it remains *β* in most words.

1. A special cluster treatment dating to the Indo-Iranian period (which may even be of Indo-European antiquity) is *Bartholomae’s Law*, or simply BARTHOLOMAE, in honor of its discoverer. In effect, Bartholomae observed that, in a sequence of a voiced aspirate and a voiceless stop or sibilant in Indo-Iranian, the voiceless stop was voiced, and the aspiration passed to the end of the cluster: PIE *D^hT*, *D^hS* > IIr. *DD^h*, *DZ^h*, respectively. This change can be seen throughout all of Indo-Iranian, and in Avestan it is interesting to note the differences that emerge between the dialects. Old Avestan preserves the results of BARTHOLOMAE exceptionlessly, while Young Avestan has all too often analogically remade the outcomes of BARTHOLOMAE: OAv. *aogədā* versus YAv. *aoxta*, both from IIr. **a_ug-d^ha* < **a_ug^h-ta* (3.sg.pres.mid.inj. of *aoj* ‘say’); cf. also OAv. *aogəžā* (2.sg. < **a_ug-ž^ha* < **a_ug^h-sa*). YAv. does preserve some exceptional cases, such as *ubdaēna-* ‘made of fabric’, which contains the ppp. of *vaf* ‘weave’: in *ubda^o*, Skt. *ubdhá-* < **(H)ub^h-tá-*, cf. Gr. *ύφαίνω*.

2. When two dental stops coincided, an epenthetic sibilant arose (see § 11.20.2), which was also susceptible to BARTHOLOMAE: Av. *vərəzda-* (ppp. to *vard* ‘grow’, Skt. *vṛddhá-* < **vṛd^h-tá-*); Av. *dazdē* (3.sg.pres.mid.ind. of *dā* < **d^had^h-taj*, Skt. *dhatté*, versus *dastē* < **dad-taj*). These forms show the way in which the sibilant developed in the cluster **-dd-* > **-d^zd-*: it lost the first dental of the cluster and became *-zd-*.

§ 11.12. Iranian **g* < PIE **g*, **g^h*, **g^u*, and **g^{uh}* is found in (a) OAv. *baga-* ‘portion’, YAv. *baya-*, Skt. *bhága-*; OAv. *ugra-* ‘mighty’, YAv. *uyra-*, Skt. *ugrá-*; YAv. *aṅušta-* ‘toe’, Skt. *aṅuṣṭhá-*; (b) OAv. *darəga-* ‘long’, YAv. *darəya-*, Skt. *dīrghá-*, Gr. δολιχός < PIE **dlh₁g^hó-*; YAv. *mazga-* ‘marrow’ ≈ Skt. *majján-*, OHG *marg* < PIE **mosg^h-*; YAv. *zaŋga-* ‘ankle’, Skt. *jānghā-*; (c) Av. *gāuš* (nom.sg. of *gauu-* ‘cow’), Skt. *gáuh*, Gr. βούς < PIE **g^ueh₃us*; (d) Av. *garəma-* ‘heat’, Skt. *gharmá-* < PIE **g^{uh}or-mó-*, cf. Lat. *formus*, Gr. θερμός.

In YAv., *γ* (< *g*) is lost before *u* / *uu*: cf. YAv. *druuaŋt-* versus OAv. *drəguuaŋt-*; YAv. *raom* ‘swift’ (acc.sg. < **raŋum*), cf. Skt. *raghúm*; YAv. *Mourum*, OP *Margum* ‘the country Margu’. However, *γ* could be reintroduced through intraparadigmatic analogy: YAv. *driyūm* (acc.sg. of *driyu-* ‘poor’) after *driyaōš* (gen.sg.).

1. *ǰ* appears in final position in place of *g*, and is thus probably unreleased; cf. § 5.2.2. Besides *t*, *ǰ* is the only stop permitted in absolute auslaut. On the relation to the other unreleased consonant, *t*, cf. § 11.10.2 (end).

2. The same conditioning factors that caused Ir. **č* > Av. *c* (§ 11.9) induce Av. *j* (< Ir. **ǰ* < PIE **g*, **g^h*, **g^u*, and **g^{uh}* before the front vowels *ē*, *i*): YAv. *jiia* (§ 11.1.3), Skt. *jyá* < PIE **g^uiHeh₂* (cf. Gr. βίός); Av. *jaiŋti* (3.sg.pres.act.ind. of *jan* ‘beat, kill’), Skt. *hánti*, cf. Gr. θείνω < PIE **g^{uh}en*; and especially OAv. *aogō* versus *aojanhā* from the *s*-stem *aojah-*, cf. Lat. *gen-us* (< *-os): *gen-er-is* (< *-es-es); cf. the synoptic Table 3 under § 11.7.

j is frequently extended throughout a paradigm, rather than alternating with *g*: cf. the formations to the root *gam* < **g^uem-*, which usually appear in Avestan with *jam*, whereas Sanskrit has generalized *gam*: cf. the Av. pres. stem *ja-sa-* versus Skt. *gá-cha-*, both from **g^um-ske-* (cf. impv. Gr. βάσκε).

§ 11.13. Av. *d* comes from Ir. **d* < PIE **d/d^h*: Av. *dasā* ‘ten’, Skt. *dása* < PIE **dekm̥*; Av. *dar* ‘hold’: OAv. *dāraiaŋt*, Skt. *dhar*: *dhāráyati*. The merger of the two Indo-European phonemes **d* and **d^h* in Iranian resulted in an important homonymy: Av. *dā* ‘give, place’ corresponds to both Skt. *dā* ‘give’, Gr. δίδωμι, Lat. *dō* < PIE **deh₃* and also Skt. *dhā* ‘place’, Gr. τίθημι, Lat. *fēcī* < PIE **d^heh₁* (though they can be distinguished in a few instances, cf. § 11.11.2).

Apart from the conditions formulated above (§ 11.11), some further instances in which the YAv. fricativization of *d* to *δ* is not found may be mentioned: in reduplicated formations (*dadāθa*, etc.), in compounds with preverbs (*vidaēuua-*, etc.) on account of influence from the simplex; likewise, it does not usually occur when the *d* is in contact with an *r* (*arəduuī-*, *ərəduua-*, *xšudra-*, *varəduua-*), though lenited forms (*arəda-*, *ərəδβa-*, *budra-*, *vaδre*, etc.) are not rare.

In word-internal position, Ir. *-dn-* simplifies to Av. *-n-*: Av. *būna-* ‘depth, ground’, < **budna-*, Skt. *budhná-*; Av. *asna-* ‘near’ < **nsdno-* (cf. the Skt.

comparative *nédīyas-*, YAv. *nazdiūō*); *x^oaēna-* ‘melted’ < **s_uaiǵna-*, cf. Skt. *svinná-*.

In YAv., *d* in the word-initial cluster #*dm* becomes #*nm*: YAv. *nmāna-* ‘house’, but OAv. *dāmāna-* (Skt. *māna-*).

§ 11.14. PIE **b* was a marginal phoneme, so much so that the correspondences (and the words) that contain it are very scarce and controversial. The usual source for Avestan *b* was the PIE voiced aspirate **b^h* (> Ir. **b* > Av. *b*): YAv. *barən* (3.pl.pres.act.inj. of *bar*), Skt. *bhāran*, cf. OP *abaraⁿ*, Gr. φέρω, from the PIE root **b^her* ‘bear’; OAv. *aibī* ‘to, towards’, Skt. *abhī*; YAv. *upa.skaṇbəm* ‘pillar’, *fra.sciṇbana-* ‘beam’, cf. Skt. *skambhá-* ‘support’.

The phonetic development of certain clusters is a source of new, non-etymological instances of *b*: 1. in the word-initial cluster OAv. *db-* / YAv. *tb-*, originating from the sequence < **d_ui-*: cf. OAv. *daibiš* ‘hate’ (with anaptyxis and epenthesis; cf. *daibišəntī* 3.pl.pres.act.ind.), YAv. *tbiš*, Skt. *dviš* (cf. *dvéṣti*), cf. Gr. δεινός ‘fearful’. However, **d_u* > OAv. *duu-*: Av. *duuaēšah-* ‘hostility’, Skt. *dvéśas-*. In YAv., one also finds *b-* as an outcome of the cluster **d_ui-*: *bitiia-* ‘second’ versus OAv. *daibitiia-* and Skt. *dvitīya-*. 2. The Ir. cluster **j_u* (< PIE **ǵ^(h)_u*) likewise becomes *zb* in Av. (and other Ir. dialects): *zbaieiti* (3.sg.pres.act.ind. of *zū* ‘call’; Skt. *hváyati* < PIE **ǵ^h_uH*); *zbarəmna-* (mid.part. to *zbar* ‘move crookedly’; cf. Skt. *hvárate* < PIE **ǵ^h_uer*).

3. In YAv., *b* fricativizes to *β* and further to *uu*, following the formulation in § 11.1.4, and the exceptions mentioned under § 11.13 also apply: reduplicated formations (*bābuuarə*, etc.) and compounds with preverbs (*ābərətəm*, etc.).

4. On the change of **u* to *β* after a dental stop, forms such as Av. *θβōraštar-* ‘creator’ versus Skt. *tváṣtar-* may be adduced; see two further examples under § 11.17.1.

§ 11.15 Fricatives

Avestan possesses a series of voiceless fricative consonants, *x*, *θ*, and *f*, which derive from Ir. **x*, **θ*, **f*, resp. This series did not exist in Indo-Iranian, as it developed during the Iranian period due to changes in certain sequences of consonants. On the one hand, these fricatives come from voiceless stops when they preceded another consonant, thus *TC* sequences; on the other hand, these fricatives come out of the voiceless aspirates of Indo-Iranian, whose origin lies in sequences of voiceless stop + laryngeal, thus **TH*.

§ 11.16. Av. *x* thus comes from of Ir. **x* < PIE **k*, **k^h* before *C*: Av. *xratu-*, Skt. *krātu-*, cf. Gr. adj. κρατύς; YAv. *huxratu-*, Skt. *sukrátu-*; YAv. *baxta-* (ppp. to *baj*

‘apportion’, with Ilr. devoicing of **g* to **k* before a voiceless stop; but cf. 11.10.2. and fn. 11 above), Skt. *bhaktá-*; Av. *haxman-*, Skt. *sakman-*, from PIE **sekʷ* ‘follow’. The same root may serve to demonstrate the development of Ir. **x* from the sequence **kH* / **kʷH*: YAv. *haxa* ‘follower’ (dat.sg. *haše*), Skt. *sákhā* (dat.sg. *sákhye*) < PIE **sekʷh₂-oj*; cf. Lat. *socius* as well.

Some cases of non-etymological *x*, which have sporadically developed before *š*-, may be noted: *xšn-* < **šn-*: Av. *xšnā-* ‘know’, OP *xšnā*, Skt. *jñā* < Ilr. **jn-* < PIE **ǵn-*; *xšuuas* ‘six’, Skt. *ṣaṭ*.

On *acute* and *xʷ*, cf. the paragraphs corresponding to the particular developments of the sibilant in § 11.28 and § 11.30, resp.

§ 11.17. 1. Av. *θ* comes from Ir. **θ* < PIE **t* before *C*: YAv. *θraīias-ca* ‘three’, Skt. *tráyas*, Lat. *trēs*; *caθbārō* ‘four’, Skt. *catvāras*, Doric Gr. *τέτορες* < PIE **kʷétμor-es*; Av. *θβqm* ‘you’ (acc.sg.), Skt. *tvám*; Av. *mərəiθiiu-*, Skt. *mṛtyú-*.

2. After *x* and *f*, Iranian *θ* has undergone voicing, becoming *δ*: OAv. *vaxədra-* ‘mouth’ (Skt. *vaktrá-*); Av. *uxδa-* ‘word’ (Skt. *ukthá-*); YAv. *vauuaxda* (2.sg.perf. act.ind.; Skt. *uváktha*); *fəδrōi* (from *ptar-*); OAv. *rafədra-* (from *rap*). On *p*, cf. § 11.10.3.

3. In the same fashion, Av. *θ* comes out of Ir. **θ* as the outcome of the PIE sequence **tH*: Av. *pərəθu-*, Skt. *pṛthú-*, Gr. *πλάτυς* < PIE **pṛth₂ú-*; Av. *raθa-* ‘chariot’, Skt. *rátha-* < **róth₂-o-* (cf. Lat. *rota* < **roteh₂*). The inflection of the word for ‘path’, YAv. *pantā* beside Av. *paθō*, is illustrative; cf. ch. 3, fn. 2.

4. In spite of regular fricativization, the original *t* is preserved in some cases: following *s* (though the *t* is preserved in word-final position only if *i* or *u* precede the *st*-cluster—otherwise, the *t* disappears; cf. § 11.10.1): OAv. *astuuant-* ‘bone’, cf. Skt. *asthanvánt-*; YAv. *gauuāstriia-* < **uāstrija-*; YAv. *hastra-* ‘gathering, meeting’ from *had* ‘sit’, Skt. *sattrá-*. In final position, cf. OAv. *vqs* (3.sg.aor.act.inj. < Ilr. *uānst* to *van*); OAv. *sqs* (to *saṇd* ‘resemble’), etc., but YAv. *nāist*, **mōist* (3.sg.aor.act.inj. to *nid* ‘insult’ and *miθ*), OAv. *urūaost* (3.sg.pluperf.act.inj. to *rud* ‘moan, wail’).

t is also preserved after *š*: *fərašaostra-* PN (which contains the word *uštra-* ‘camel’, Skt. *uṣtra-*); YAv. *pištra-* ‘bruise’ (cf. the Skt. root *peṣ* ‘crush’, Lat. *pīnsō*); YAv. *xštuua-* ‘sixth’. In contrast to *st*-clusters, *t* also remains in word-final position after *š* regardless of the preceding segment: OAv. *tāšt*, *dōrašt*, *cōišť* (3.sg.aor. act.inj. to *taš* ‘fashion’, *dar*, and *ciš*, resp.). On the development of the cluster **ts* > Av. *s*, see § 11.11.2.

§ 11.18. Av. *f* comes out of Ir. **f* < PIE **p* before *C*: cf. the Av. preverb *fra*, Skt. *prá*, Lat. *pro*; YAv. *afnaṇʰaṇt-* ‘landowner’, cf. Skt. *ápnas-*, *ápnasvant-*, PIE **h₂ep-nes-*. *p* is preserved before *t*, but not in the sequence *ptr*; cf. § 11.10.3.

One unexpected source of YAv. *f* is Iir. **b^h* in the word *nāfa-* ‘navel’, cf. the gathicism in YAv. *nabā-nazdišta-* ‘close relative [i.e., the closest with respect to the navel]’, Skt. *nābhā-nēdiṣṭha-*.

§ 11.19 Sibilants: *s, z, ś, ṣ, ṣ́, ṣ̣*

The PIE sibilant **s*, in the course of its history going into Avestan, has undergone various changes, which, in some cases, have profoundly altered its nature. To the inherited *s* (along with the allophonic variants *z* and perhaps *ṣ́?*), other sibilants that have been created later are added. A list of the Avestan sibilants with indications of their possible origins is given below.

§ 11.20. Av. *s* arises from various sources. Firstly, 1. it comes from PIE **s* > Ir. **s* when it occurred before a stop (or before the nasal *n*, but not before *m*, cf. § 11.26.2): Av. *skənda-* (probably Skt. *skāndha-*); OAv. *āskaiti-* ‘community’ (from *ā+hac*; cf. Skt. *āsk-ra-*); OAv. *scantū* (3.pl.aor.act.impv. to *hac*); Av. *stā* ‘stand’ (Skt. *sthā*, Gr. ἵστῆμι, Lat. *stō*); Av. *astī* (3.sg.pres.act.ind. to *ah*; Skt. *āsti*, Gr. ἔστι); OAv. *vastē* (3.sg.pres.mid.ind. to *vah*; Skt. *vāste*); OAv. *kas-nā* (nom.sg. of *ka-* + particle *nā*; see further OAv. *kā*, Skt. *kās*); Av. *sāsnā-* ‘lesson’ (cf. *sāh* ‘teach’, Skt. *sās*); Av. *sparz* ‘aspire to’ (Skt. *sprh*).

2. Av. *s* can also derive from an excrescent *s* inserted between two dentals in the sequence **-tt-* > **-tst-* > *-st-* (cf. further § 11.24.3): Av. *ustāna-* ‘stretched (out)’ (Skt. *uttāná-*); OAv. *vōistā* (2.sg.perf.act.ind. of *vid*; Skt. *véttha*; Gr. οἶσθα); and, from the same root, *vista-* (ppp.; Skt. *vittā-*). For the change of **-tst-* to *-st-*, compare the outcome in other clusters such as **matsiā-* ‘fish’ > YAv. *masiia-* versus Skt. *mátsya-*; cf. further Av. *hqs* (pres.part.act. of *ah* ‘to be’) < Iir. **Hsant-s*). An outcome *-zd-* arose in combination with a voiced aspirate plosive, cf. § 11.11.2.

3. PIE **k* > Iir. **c* > Av. *s*: Av. *dasā* ‘ten’ (Skt. *dása*, Lat. *decem*, Lith. *dešim-tis* < PIE **dekṃ*); YAv. *satəm* ‘hundred’ (Skt. *śatām*, Lat. *centum*, Lith. *šūntas* < PIE **dkṃtóm*); Av. *aspa-* (Skt. *ásva-*; cf. § 11.10.3); YAv. *asman-* ‘stone, sky’ (Skt. *ásman-*, Gr. ἄσμιον); YAv. *srauih-*, OAv. *sraēšta-* (comparative and superl., resp., to *sriā-*); Av. *sru* ‘hear’ (Skt. *śrav*, Gr. κλύω, Lat. *cluēre*); Av. *sāstar-* ‘master’ (Skt. *śāstar-*); Av. *sāh* ‘teach’ (Skt. *sās*).

4. The PIE sequence **sk* developed to **sc* in Iir. (and in RUKI environments [§ 11.20.5] in Ir. to **śc*), in Ir. to **sc*, and finally, in Av., to *s*: YAv. *jasaiti* (3.sg.pres.act.ind. to *gam*; Skt. *gáchati*); Av. *pərəsaitē* (3.sg.pres.mid.ind. of *fras*; Skt. *prcháte* < PIE **prk-ské/o-*; Lat. *poscō*, *precor*).

5. A group of segments that affected PIE **s*, inducing phonetic changes probably already in the Indo-European period, makes up the so-called “RUKI environment”. This term refers to the group of phonemes *ĩ ũ r k* (as well as

their respective variants *i u r, K*) before *s, and the consequent articulatory change of *s to *š. The effects of RUKI may be observed in all of the *satəm* languages (§ 11.7), such as the Indo-Iranian and Balto-Slavic subgroups of Indo-European.

Examples include: the ending of the inst.pl. *-bīš*; Av. *ašiš* ‘prize’; YAv. *pištra-* (Skt. *peṣ*, Lat. *pistus*); YAv. *vīša-* ‘poison’ (Skt. *viṣá-*); YAv. *zušta-* ‘enjoyed’ (Skt. *juṣṭá-*; cf. Lat. *gustō*); YAv. *aršti-* ‘spear’ (Skt. *ṛṣṭí-*); Av. *ratuš* ‘span, time’; Av. *tanuš* ‘body’; OAv. *dōrāšt* (3.sg.aor.act.ind. to *dar*); *pāšnā-* ‘heel’ (cf. Skt. *pārṣṇi-*, Gr. *πέρωνη*, Lat. *perna*); OAv. *nārəš*, YAv. *narš* (gen.sg. of *nar-* ‘man’); Av. *vaxšt* (3.sg.aor.act.inj. to *vaxš* ‘grow’; cf. Skt. impf. *aukṣat*; Gr. *ἀέξω* < **h₂ueg[-s]*); *vaxšūā* (1.sg.pres.act.ind. to *vac* ‘speak’; Skt. *vac* < PIE **uek^u*); Av. *vašī* (2.sg.pres.act.ind. to *vas* ‘desire’; Skt. *vakṣi* to *vaś* < **uek-si*); YAv. *mīžda-* ‘reward’ (Skt. *mīdhā-*, Gr. *μισθός* < PIE **mīzd^hó-*); OAv. *aogəžā* (2.sg.pres.mid.ind. < **augh-sa*; cf. § 11.11.1). From these examples, it may be inferred that RUKI affected Indo-Iranian *z in addition to *s.

§ 11.21. Av. *š* comes out of 1. Iir. **ć* > Ir. **c* preceding *t, d^h*, and *b^h*: YAv. *ašta* ‘eight’ (Skt. *aṣṭá*, PIE **h₃ekteh₃*); YAv. *našta-* (ppp. to *nas* ‘disappear’; Skt. *naś*); YAv. *vašti* (3.sg.pres.act.ind. to *vas*; Skt. *váṣṭi*; compare the 1.sg. *vasamī*; Skt. *vásmi*); *dərəšta-* (ppp. to *dars*; Skt. *dṛṣṭá-* to *darś*). 2. *š* also comes out of Iir. **ć* or **j* > Ir. **c, *j* before *n* word-internally: YAv. *frašna-* ‘question’ (from *fras*; Skt. *praśná-*; cf. OAv. *frasā-* ‘id.’); YAv. *frāšnaoiti* (from *fra+nas* ‘carry’; Skt. *asnóti*); YAv. *frašnu-* (*fra+žānu-* ‘with the knees forward’; compare, for example, *žnubiias-ci*; cf. § 11.25.4). Some notable exceptions to this development do exist, though they may be explained by analogy to other forms without the *š*: OAv. *vasnā* ‘according to my will’ (inst.sg. of *vasna-*?) instead of †*vašna* (cf. OP *vašnā*) by analogy to the (verbal) stem *vas-* and *vasah-*; Av. *yasna-* (Skt. *yajñá-*) by analogy to the stem *yaz-*. 3. From *s affected by RUKI, cf. § 11.20.5 with examples.

4. The Iir. sequence **ćs* > **čš* becomes Av. *š*: *mošu-cā* ‘soon’ (Skt. *makṣú*, Lat. *mox*); Av. *vašī* (2.sg.pres.act.ind. to *vas* < < PIE **uek-si*; cf. 3.sg. *vašti*). 5. In contact with a preceding labial, *š* (and *ž* cf. § 11.25.2) are also found: *nafšu-cā* (loc.pl. of *napāt-* ‘grandson’); *drafša-* ‘banner’ (Skt. *drapsá-* ‘drop’) *fšuo* ‘livestock’ < **pšu-* < **pku-* (cf. *pasu-*, Skt. *paśu-*, Lat. *pecus*). 6. *š* also arises from the sequence **t^k*: *tašan-* ‘shaper, carpenter’ (Skt. *tákšan-* < **tetkón-*), *šaēti* (3.sg.pres.act.ind. to *ši* ‘dwell’; Skt. *kṣēti*, Gr. *κτίζω*) and, from the same root, Av. *šōiθra-* ‘region, dwelling’ (Skt. *kṣētra-*).

§ 11.22. *š* is originally an Avestan development of the sequence *rt* under certain accentual conditions; however, later in the transmission and manuscript tradi-

tion, *š* has frequently become confused with *ṣ̌*, and at times with *ṧ* as well. The origin of and examples for *ṣ̌* are laid out in § 11.2.3.

§ 11.23. *ṧ* is a palatal phoneme. 1. In the manuscript tradition, the interchange of *š* and *ṣ̌* with *ṧ* is often encountered, despite the fact that all of these phonemes were distinct in the archetype. *ṧ* comes out of Ir. **č̣i*, which became OAv. *ṧi* > YAv. *ṧi/ṧ*: OAv. *ṧiiaoθana-*, YAv. (gathicism) *ṧiiaoθna-* (< **č̣iaytna-* ≈ Skt. *cyautná-*; cf. PIE **ḳi̯eu*, Skt. *cyav*, Gr. *κῑνέω*). In YAv., *ṧ* does not occur followed by *ii* (*i̯*), which is to say that the merger of *š* and *ii* in a single phoneme *ṧ* had already been completed. However, in YAv., the manuscripts usually do not write the expected *ṧ*, but use the two other sibilant letters: OAv. *ṧiātō* (ppp. to *ṧiā*, cf. Lat. *quiētus*) versus YAv. *šātō* (vv.ll. *ṧiātō*, *šātō*, *šātō*) ‘at ease’.

2. See § 11.16 for the vacillation between initial *xṣ̌-* and *ṣ̌-* in some words.

§ 11.24. The origin of Av. *z* is also heterogenous. 1. Firstly, it is the outcome of the PIE palatovelars **ǵ*, **ǵʰ*, by way of an Ilr. stage **ǵ*, **ǵʰ* > Ir. **j* [dz]: Av. *zaoša-* ‘pleased’ (Skt. *jóša-*; cf. Gr. *γεύομαι*, Lat. *gustō*; PIE **ǵeus*); YAv. *zraiiāh-* ‘sea’ (Skt. *jrāyas-*); Av. *zāta-* (ppp. to *zan* ‘generate’, Skt. *jātā-* to *janⁱ*); YAv. *zazāmi* (to *zā* ‘leave’, Skt. *jāhāmi* to *hā*); Av. *zaoatar-* ‘priest’ (Skt. *hotár-*; cf. Gr. *χέω*, PIE **ǵʰeu* ‘pour’); YAv. *ziūā* ‘winter’ (nom.sg.; cf. Skt. *himá-*, Gr. *χίωv*, Lat. *hiems*).

2. *z* is also found as the product of the voicing of **s* preceding a voiced stop: Av. *nazdišta-* (superl. of *asna-* ‘near’, Skt. *nédiṣṭha-* < **nasd^o*); Av. *mazdā-* ‘wisdom’ (Skt. *medhā-* < Ilr. **mas-d^haH-* < PIE **m̥ns-d^heh₁-*); OAv. *zdī* (2.sg.pres.act. impv. to *ah*; Skt. *edhi* < **azdhī*; cf. Gr. *ἔσθι*); YAv. *mazga-* (cf. Skt. *majján-*; § 11.12.b); OAv. *θrāzdūm* (2.pl.aor.mid.inj. to *θrā* ‘protect’).

3. In addition, *z* arises secondarily from sequences of voiced dental stops **-dd-* > **-d^zd-*, which result in Av. *-zd-* (cf. further § 11.20.2): OAv. *fra-uuōiz-dūm* (2.pl.aor.mid.inj. of *vid*); OAv. *sazdiūai* (mid.inf. to *saṇd* or *sqh*), *dazdi-īai* (mid.inf. to *dā*); or in certain BARTHOLOMAE sequences (cf. § 11.11.2): Av. *vərəzda-* (Skt. *vṛddhá-* < **vṛd^h-tá-*); OAv. *azdā* ‘certainly’ (OP *azdā*, Skt. *addhā*).

§ 11.25. Av. *ž* also has several possible origins: 1. from the allophone of PIE **z* > Ilr. **z* affected by RUKI (§ 11.20.5, with examples), including compounds with the pejorative prefix *duš^o* (Skt. *duṣ^o*, Gr. *δυσ^o*) plus a second element with a voiced first consonant: *dužuuacah-* ‘with a bad word’ (Skt. *durvacas-*); *duždāh-* ‘niggardly’.¹² 2. In contact with Iranian labials, *ž* is also found (and *ṣ̌*; cf.

12 Curiously, *duš^o* before *m* was preserved as such, thus the tradition gives *duš-manah-*. The

§ 11.21.5): *diβža-* ‘deception’; *diβžaidiūāi* (pres.desiderative.inf. to *dab* ‘deceive’ < **di-dbh-sa*; cf. Skt. *dīpsati* to *dabh*); *vaβžaka-* ‘wasp’ (< **uabz^ha-* < PIE **uob^hso-*).

3. *ž* can also come out of Ilr. **j*, **j^h* > Ir. **j* preceding *t*, *d^h*, *b^h*: OAv. *važdra-* ‘driver’ (Skt. *vódhar-*; cf. Lat. *uehō*; PIE **ueǵ^h*); OAv. *gərəždā* (< **grǵ^h-ta*, 3.sg.pres. mid.inj. to *garz* ‘lament’; cf. Skt. *garh*). Ilr. **j*, **j^h* also give Av. *ž* 4. before word-initial *n*: *žnātar-* ‘knower’ (Skt. *jñātár-*; cf. Gr. *γνωστήρ*; PIE **ǵneh₃*); *žnubūias-ciṭ* (abl.pl. of *zānu-* ‘knee’, Gr. *γόνυ*); the outcome in word-internal position, however, is *šn*: YAv. *barsna* (inst.sg. of *barəzan-* ‘height’); cf. further § 11.21.2.

5. The Ilr. sequences **j+s* and **j^h+s* become Ir. **jž* > Av. *ž*:¹³ YAv. *uz-uuažat* (3.sg.aor.act.subj. to *vaz*; Skt. *vakṣat* < PIE **ueǵ^h-se-*); OAv. *dīdərəžō* (2.sg.pres. desiderative.act.inj. to *darz* ‘strengthen’ < **didǵ^h-sa-*; Skt. *darh*).

6. The Av. sequence *-jī-* becomes *ž* in YAv.: *družaiti* (to *druj*; Skt. *drúhyati*), but OAv. *a-drujiiaṇt-*; *bažat* (3.sg.pres.pass. in *-iia* to *baj* ‘apportion’, Skt. *bhaj*) may also be included here, as well as the YAv. stem *daža-* ‘burn’ (i.e., a stem in *-iia*, like in the YAv. type *jaiḍiia-* ‘pray’; cf. Skt. *dáhati*).

A YAv. phenomenon that is usually interpreted as a dialectal feature may be detected in the change of intervocalic *j* to *ž*: *snaēžāṭ* and the part. *snaēžīṇt-* (to *snaēžā* ‘snow’). Contrary to what was formerly believed, this development usually presents itself in nominal forms (cf. *ažī-*, Skt. *áhi-*; etc.), but is much less common in verbal forms (only three): *snaēžā-* (versus Skt. *snihyati*), *naēniža-* (‘wash’, Skt. *nenikté*), *°δβōža-* ‘wave’; only these three may indeed be explained as exhibiting this dialectal feature.

§ 11.26 The Fricative *h* and its Derived Phonemes: *́x*, *x^v*, *ǵh*, *ǵh*, *ǵ^vh*

1. A first change, which must have taken place in the Iranian period at the latest, is the development Ilr. **s* > Ir. **h* in initial position and in word-internal position before sonorants and *í*, *u*, *m*, *r*.

Av. *h* comes from Ir. **h* < PIE **s* in both word-initial and word-internal position: YAv. *hapta* ‘seven’ (Skt. *saptá*, Gr. *ἑπτὰ*); *hac* (Skt. *sac*, Gr. *ἔπομαι*, Lat. *sequor*); *hauruua-* (Skt. *sárva-*, Lat. *saluus*, Gr. (Ionic) *οἰλος*); Av. *ahu-* (Skt. *ásu-*); *ahura* (Skt. *ásura-*); Av. *ahī* (2.sg.pres.act.ind. to *ah*; Skt. *ási*, Gr. *εἶ*); OAv. *kahiūā* (gen.sg. of the interr. *ka-*; Skt. *kásya*); OAv. *manahi-cā* (loc.sg. of *manah-*; Skt.

single example of OAv. **dužmanah-* ‘ill-minded’ (Y 49.11; Gr. *δυσμενής*) could originate in the (Persian) vulgate pronunciation.

13 The same development would take place in a potential PIE sequence **d^(h)ǵ^h*. The YAv. example *yžar* ‘flow’, cf. Skt. *kṣar* (*kṣáratī*) and Prākṛit *jharai* ‘to drip’, must derive from PIE **d^hǵ^her-*.

mánasi). As the examples make evident, *h* is preserved only before *i* and *u*, while between other vowels it was nasalized and became *ɲh*; § 11.27.

2. The change to *h* may also be observed before *m*: Av. *ahmī* (1.sg.pres.act.ind. to *ah*; Skt. *ásmi*, Gr. εἰμί); OAv. *āhmā*, YAv. *ahma* (acc.pl. 1.pers.pron.; Skt. *asmán*, Aeol. Gr. ἄμμει); Av. *dahma*- ‘wonderful’ (Skt. *dasmá-*); *grāhma*- PN. The graphic sequence *hm* in fact represents a voiceless *m*, which is also written as *ṃ* in the manuscripts; cf. § 5.2.5. In initial position, *h* is lost before *m*: cf. *mahi* (Skt. *smási*), or the preposition *maṭ* ‘with’ (Skt. *smád*).

3. Depending upon phonetic environment, the new *h* was preserved as such (see above), or became the new phonemes *ɲh* (§ 11.27), *ś* (§ 11.28), *ɲh* (§ 11.29), *x^v* (§ 11.30), *ɲ^vh* (§ 11.31), or simply *ɲ*.

The change of *h* to *ɲ* is exceptional and occurs solely before *r* word-medially. In effect, the PIE sequence **-sr/l-* becomes Avestan *-ɲr-*: *aɲra-* ‘evil’ (Skt. *asrá-*); *daɲra-* ‘experienced’ (Skt. *dasrá-*). Note that *ɲr* also takes on other spellings in the manuscript tradition: *ɲhr*, *ɲgr* (a hypergathicism; cf. § 11.3.2). Word-initial **sr-* simplifies in OAv. to *r-*: *rəma-* ‘brutality’ (cf. Skt. *srāma-* ‘paralytic’), but in YAv. it seems to have become *θr-*: YAv. *θraotō*^o (Skt. *srótas-*, but OP *rautah-*).

§ 11.27. **ɲh** arises from the sequence *ǎhǎ* > Av. *aɲha*: *aɲhat* (3.sg.pres.act.subj. to *ah*; Skt. *ásat*); OAv. *manayhā* (inst.sg. of *manah-*); OAv. *nəmaɲhā* (inst.sg. of *nəmah-*); OAv. *āɲharə* (3.pl.perf.ind. to *ah* ≈ Skt. *āsúr*). Due to intraparadigmatic pressure, it is not uncommon to find *ɲh* extended to positions where it would normally be impermissible: for example, from Ir. **vahu-*, the following paradigm results: nom.neut. *vohū*, gen.sg. *vaɲhəuš* (< **uahauš*), and a dat.sg. *vaɲhauuē*, but also nom.sg.masc. *vaɲhuš* and acc.pl. *vaɲhūš-cā*. In YAv., *ɲh* can also come from Ir. **ns* before *ǎ*, and is equivalent to OAv. *ɲgh* in this environment; cf. § 7.9.3.

§ 11.28. **ś** is a secondary product of the new Iranian *h*. *ś* is found in the word-initial sequence *#śii-* as the Av. reflex of Ir. **h₁-*: OAv. *śiiām*, *śiiā*, *śiiāt* ... (opt. of *ah*; Skt. *śyāt*), YAv. *śiiāona-* ‘Name of a people’. In word-internal position, Ir. **h₁* is preserved in OAv., but yielded *ɲh* in YAv. before *a*-vowels. Before *ǎ*, we find *śii* in both varieties of Avestan. Examples: OAv. *vahiiah-* (comparative of *vohu-*; Skt. *váśyas-*); *ahiia* (2.sg.pres.act.impv. to *ah* ‘throw’; Skt. *ásya*); the ending of the thematic gen.sg. as in *madahiia* (of *mada-* ‘intoxicating drink’); acc.sg. *daśiiūm* ‘country’. YAv. *hii-* as, e.g., in *māhiia-* PN (Skt. *māśya-*; cf. Av. *māh-* ‘moon, month’), is found before a disyllabic suffix *-i.ia-* < Ir. **-i.Ha-* ‘belonging to’.

Word-internally, OAv. has a variant *-śii-* before an *a*-vowel, found mainly if the following syllable is non-final or is a word-final closed syllable. The conditions are not completely clear, however. Examples include OAv. *nəmaśiiāmahī*

(1.pl.pres.act.ind. to *nəmaxīia-* ‘do homage’, denom. to neut. *namah-* ‘homage’; cf. Skt. *nāmas-*), *x^vaxīiāi* (dat.sg.f. of the refl.pron. *x^va-* ‘own’; Skt. *svá-*).

§ 11.29. **ŋh** properly belongs to YAv., and represents the development of *-h_i-* > *ŋh_i* (i.e., once *h* had become *ŋh*): YAv. *vaŋhō* versus OAv. *vahiiō* (nom.neut. of the comparative of *vohu-*; Skt. *vásyas-*); *daŋhāuš* versus OAv. *da^xiūuš* (gen.sg.);¹⁴ *aŋhāi* versus OAv. *axīiāi* (cf. above). To find *ŋh* instead of *ŋh* in the manuscripts is commonplace.

§ 11.30. **x^v** is a secondary product of Ir. *h*, and represents the Ir. sequence **h_u* in a single grapheme (contrast *xīi* < **h_i*; cf. above): Av. *x^vafəna-* / *x^vafna-* ‘sleep’ (Skt. *svāpna-*); *x^va-* (reflexive pron.; Skt. *svá-*).

Word-internally, the treatment of **h_u* varied, given that OAv. preserved it as *huu*, while in YAv. it becomes *ŋ^vh* (cf. below). *-x^v-* appears sporadically: OAv. *nəmax^vaitiš* (nom.pl.fem. ‘devotees’). This reflex alternates with the usual OAv. *-huu-* in the same way that *-xīi-* alternates with *-hii-* (see § 11.28). Word-initially, the regular reflex of **h_u-* was *x^v-* in OAv. and YAv. Initial *huu-* is found where *hu-* ‘good’ or *huu-* ‘sun’ were restored. Compare OAv. *x^vəŋg* (i.e., /hu_uəŋg/, gen.sg. of *x^van-*; but nom.acc. *huuarē* /hú_uar/; Skt. *svār*), and OAv. *x^vāθra-* ‘well-being’ (*hu-āθra-*); *x^viti-* ‘of good access’ (*hu-iti-*); YAv. *x^vita-* (*hu-ita-*; Skt. *suvitá-*); *x^vāstra-* ‘of good pastures’ (*hu-ūāstra-*; cf. the hydronym *x^vāstrā-*).

§ 11.31. **ŋ^vh** properly belongs to YAv. and reflects *-h_u-*. In Indian manuscripts, it also appears as *ŋuh* or *ŋh*: *yāsaŋuha*, *yāsaŋ^vha* (as well as *yāsaŋha*); *vaŋhuš*, *vaŋ^vš* (as well as *vaŋhīš*); *pərəsaŋuha*, *pərəsaŋ^va* (as well as *pərəsaŋha*). YAv. *-hu-* reflects the later addition of a vowel to a word ending in loc.pl. *-hu-*: *yāhuua*, *dāmahuua* (loc.pl. of the rel.pron *ya-* and of *dāman-* ‘creature’, resp., + the postposition *ā*; cf. § 16.8). The sequence *-h_u-* (*-hu_u-*) appears as *-huu-* in OAv.: OAv. *gūšahuuā*, *dāhuuā* (2.sg.aor.mid.impv. to *guš* ‘listen’ and *dā*, resp.; Skt. *-sva*).

14 In YAv., a case of preventive dissimilation in the acc.sg. and the gen.pl. of the stem *daŋhu-* is discernable: *da^xiūm* (also *daŋhaom*) and *da^xiūnaqm*. The presence of *m* has impeded the development of the secondary nasal *ŋ*. A similar case presents itself in the gen. *aŋhāuš*, nom. *aŋhuš* (← **ahuš*), but acc. *ahūm* or in *vaŋhuš* (analogical, cf. neut. *vohū*): *vaŋhāuš*, but *vohūm*, *vohunaqm* (Skt. *vasūnām*).

Morphology

§ 12 Introduction

In this large chapter, we will present the facts concerning nominal inflection, including sections dedicated to adjectives and their degrees of comparison, pronouns, and indeclinable words (prepositions and preverbs). Furthermore, verbal inflection and the formation of verbal stems will be discussed.

§ 13 Nominal Inflection

The nominal inflection of Avestan is inherited from the inflectional processes of Indo-European, by way of Indo-Iranian. On the one hand, Avestan exhibits an archaic system, as it retains many fossilized features that were at one time productive, but which have already fallen into disuse by the Avestan period. On the other hand, Avestan nevertheless shows some clear innovations with respect to earlier linguistic stages, though these innovations are based upon inherited processes.

As has already been explained above, one of the aims of Comparative Indo-European Linguistics is to linguistically delimit the Iranian languages and to establish, using reconstruction, a common linguistic stage shared between these languages and the Indic languages: Proto-Indo-Iranian (Iir.). Avestan morphology immediately reveals a close relationship to Vedic, the oldest attested stage of Indic. Vedic thus furnishes indispensable aid in the assessment and classification of Avestan forms, which are often very difficult to interpret, given the phonetic nature of the alphabet and the convoluted transmission of the texts. Moreover, the distinction between OAv. and YAv. further complicates linguistic and philological work.

§ 13.1 *Components of the Word*

The linguistic analysis of a word focuses, first of all, on the elements that it contains, and the objective of the analysis is the classification and definition of those elements. The first general division of formal elements allows one to distinguish a root, affix, and ending in each nominal form. An affix may precede or follow the root, on which basis it is called a ‘prefix’ or ‘suffix’,

respectively.¹ At times, the root and suffix have a very tight bond, and the whole consisting of root and suffix is then termed ‘stem’. Where the stem is coextensive with the root, one speaks of a ‘root noun’. Finally, the word, as is the usual practice for old Indo-European languages, receives endings that situate that precise form within a case/number system (i.e., they place it within a paradigm); likewise, the endings serve to establish syntactic and functional relations with respect to other words within the sentence. On many occasions, it is not possible to divide stem and ending clearly, in which case it is necessary to speak of a ‘non-segmentable ending’, rather than a simple ‘ending’.

The usual manner of writing a root is to show it in the FG form with PIE **e*, which, in Avestan, is equivalent to the full grade *a*. That is to say, for example, the root **men* (Av. *man*) means ‘think’, or the root **mekʰ* (Av. *vac*) means ‘speak’. Meanwhile, stems are given with a following dash. Thus, for example, we have the stem **mekʰ-* (root noun) ‘word’ (Av. *vac-* ‘voice’, Skt. *vák-*), or the present stem **mñje/o-* ‘think’ (Av. *mañiia-*, Skt. *mánya-*) to the root **men*; etc.

§13.2 *Accent and Ablaut*

Attentive observation of the means of inflection in particular words reveals two further morphologically relevant elements: the accent, and patterns of vowel alternation (ABLAUT), which may have originally been bound up with one another.

Little can be said about the place of the accent in Avestan, though some phenomena due to the effects of the accent have been noted in the preceding chapter. All things considered, those phenomena do not have significant implications. However, one characteristic feature of Indo-European (nominal and verbal) morphology that has left a profound trace on the daughter languages is the system of ablaut. Ablaut consists in the regulated change of particular vowels (including \emptyset) within morphological elements, i.e., in roots, affixes, and endings. Each one of these elements can take on various forms depending upon the value of the ablauting vowel. The system of ablaut, as may be seen in the Table 4 below, sets up an opposition, on the one hand, between the zero grade, full grade, and lengthened grade, and on the other hand, in the corresponding gradations, between *e* grade and *o* grade.

The relation between FG, LG, and ZG is termed ‘quantitative ablaut’, while the relation between *e* grade and *o* grade is termed ‘qualitative ablaut’.

1 Cases in which an affix is contained within the root itself are referred to as infixes. Indo-European languages normally employ infixes only in the domain of verbal inflection.

TABLE 4 *Ablaut in Indo-European*

	<i>e</i> Grade	<i>o</i> Grade
Full Grade (FG)	<i>e</i>	<i>o</i>
Lengthened Grade (LG)	\bar{e}	\bar{o}
Zero Grade (ZG)	∅	

The function of the ablaut system within a single paradigm is regulated in part by the accent, and in part by morphological category. As was already mentioned, a strict relation between accent and ablaut might have held in the proto-language. A syllable bearing the accent would then have *e* grade, while an unaccented syllable would have *o* grade or ZG. Later, during a second phase, the tightly bound relation between accent and ablaut could have been broken by accent displacement or by changes in allomorphy, such that forms with multiple *e* FGs or with ZG throughout arose.

Out of this system, Indo-Iranian, and ultimately Avestan, has maintained only quantitative oppositions, as a consequence of the developments in the Indo-European vowel system. However, remnants of the old qualitative oppositions may still be observed in the effects that certain ablaut grades produced on the preceding consonant (i.e., palatalization, cf. § 11.7, and further § 11.9., 11.12.2), or in the outcomes stemming from BRUGMANN (§ 7.4.4). Nonetheless, it must not be forgotten that, in general, these elements are mere traces of a very archaic older stage, and therefore must be treated with caution.

§ 13.3 *Paradigmatic Nominal Categories*

In the noun, Avestan distinguishes three genders: masculine, feminine, and neuter; three numbers: singular, dual, and plural; and eight cases: nominative, accusative, genitive, ablative, dative, instrumental, locative, and finally, vocative.

In Avestan, these categories are expressed within a paradigm by means of endings, which simultaneously carry information about case and number, and sometimes gender. In contradistinction to adjectives and pronouns, the noun lacks gender as a category in itself, but gender instead derives from the specific stem (lexeme). In this regard, the distinction of gender does not arise directly from the endings, save partially in the singular and in the plural of neuter nouns, but rather is evident in virtue of concord between nouns and adjectives or pronouns.

In Table 5, the fact that the endings in Avestan express more than one category, a characteristic feature of the Indo-European languages, is self-evident. The table aims to encompass all inflectional types, and is based on the for-

TABLE 5 *The nominal endings in their Proto-Avestan form*

	Singular		Dual		Plural	
	m./f.	neut.	m./f.	neut.	m./f.	neut.
nom.	*-S, *-h, *-Ø	*-Ø	*-aH	*-iH	*-ah	
voc.	*-Ø				*-H, *-Ø	
acc.	*-(a)m				*-ah, *-nS, *-nh	
gen.	*-S, *-h, *-ah		*-āh		*-ām	
abl.	*-(a)t		*-biā(m)		*-biāh	
dat.	*-ai̯				*-biš	
inst.	*-(a)H					
loc.	*-i		*-au		*-Su, *-hu	

mal evaluation of each distinct place in the paradigm. Keep in mind that the endings given there are normally sufficient to distinguish a paradigmatic slot, though possible variations in the stem or (infrequent) cases of heteroclisia must be taken into account.

§ 13.4 Endings

In the process of inflection, the stem is unified with the various endings, each of which occupies a specific place in the paradigm. The number of endings is limited and fairly small. In Avestan, the task of enumerating the endings is rendered more difficult by the tradition, which has transmitted the text with a markedly phonetic character, and as a consequence it is commonplace to find that the endings have several allomorphs.

Given the impossibility of presenting a table that encompasses all of the allomorphs of every ending for the two dialects without losing the synoptic effect, we have instead opted to present a general table with the Proto-Avestan endings, i.e., those endings that must necessarily underlie each one of the historically attested endings. Only the standard endings are included in Table 5, and account is not taken of sandhi phenomena, which will be explained separately. Likewise, the possible alternations in the stem itself, which will be detailed below under each particular class, are not considered here. In some cases, the use of archiphonemes is necessary: *S* or *M*, as well as the single laryngeal *H*, which probably still existed in Proto-Avestan. Finally, for practical purposes, realize that differences between Old and Young Avestan also appear in inflection, as, above all, in the quantity of word-final vowels, already mentioned above (cf. § 7.2): Old Avestan always has *-ā*, *-ī*, *-ū*, *-ē*, whereas Young Avestan always has short vowels: *-a*, *-i*, *-u*, *-e*.

§ 14 Case Endings of the Singular

§ 14.1. The nominative masc./fem., sometimes called “animate”, has two inflectional types. 1. The sigmatic type is more common and is characterized by the addition of an *-s* to the stem, with allomorphs that occur in virtue of the phonetic environment (i.e., RUKI, etc.). Root nouns, stems in *-t*, *-nt*, *-i*, *-u*, *-a*, as well as a few stems in *-n*, and isolated cases of *r*-stems, are all found in this inflectional type. 2. The asigmatic type is less common than the preceding type, and is characterized by a zero ending: *-∅*. This type includes some *r*-stems and *n*-stems, as well as stems in *-ā* and *-ī*. Lengthened grade of the suffix occurs in some of these classes.

§ 14.2. The acc. masc./fem. has the ending *-m* (or *-am*).

§ 14.3. The nominative/accusative neuter has, in contrast to nouns of animate gender, the same form, with a zero ending. In *a*-stems (thematic stems), the ending is *-m*.

§ 14.4. The vocative of the singular is a case form with a zero ending. The voc. of ablauting stems shows full grade of the suffix.

§ 14.5. The genitive and ablative have identical forms in IIr. (and PIE) in all inflectional types, with the exception of the thematic inflection, which has two distinct forms.

1. OAv. preserves the older state, and exhibits an ending **-as* (< PIE **-es*), which can undergo ablaut and thus be merely **-s* (cf. esp. *n*-stems, § 18.4). YAv. has slightly modified this situation, and, taking the thematic inflection as its model, formally differentiates the genitive and the ablative in all classes. The YAv. gen. follows the old gen. in **(a)s*, while the YAv. abl. takes the ending *-t̥*, adopted from the thematic inflection (§ 19.1.6). To this new ending, the postposition *ā* can be added, thus resulting in the YAv. ending *-āḍa*. On the development and graphic representation of the ending **-as*, cf. § 7.9.4.

2. The thematic inflection has, in the gen., an ending OAv. *-hiūā*, YAv. *-he*, deriving from **-sja* (§ 7.10.3), while an ending *-at̥* is employed in the ablative.

§ 14.6. The dative has, in OAv., an ending *-ōi*, which corresponds to YAv. *-e*, both deriving from Ir. **-ai̯* < PIE **-ei̯*. In some cases, the YAv. ending has been introduced into OAv. (and gathicized) as *-ē*; cf. § 7.11.1.

§ 14.7. The instrumental has an ending $-\check{a}$, but in some inflectional classes seems no longer to have any ending. This apparent lack of ending is due to the fact that the old PIE ending $*-h_1$ became $*-H$ in Ir., and in word-final position was lost without leaving any trace after a consonant or lengthening the preceding vowel (but be aware of the situation regarding word-final vowels in Av. §§ 7.2 and 13.4).

§ 14.8. The locative is another case that has a zero ending (together with lengthened grade of the suffix). Other types of formations show an ending $-\check{i}$.

§ 15 Case Endings of the Dual

§ 15.1. The nominative/accusative/vocative masc./fem. makes for a motley collection, which must be examined under each inflectional type. The PIE ending that underlies the forms is usually reconstructed as $*-h_1$. The Av. feminine forms are set up as $*-ih_1$.

§ 15.2. The nominative/accusative/vocative neut. has an ending $-\check{i}$, which is reconstructed as PIE $*-ih_1$.

§ 15.3. The dative/ablative/instrumental has $-bii\check{a}$ < Ir. $*-bi\check{a}$ as its ending. On just a single stem, the ending $-bii\check{a}qm$, identical to the Skt. $-bhy\check{a}m$, is found: YAv. *bruuat.bii\check{a}qm* ‘eyebrows’.

§ 15.4. The genitive and locative have distinct endings in Iranian, in contrast to the common endings that they share in Sanskrit. In effect, compared to the usual ending in Skt., $-oh_1$, Avestan exhibits, on the one hand, 1. a genitive ending $-\check{a}$ (< IIr. $*-\check{a}s$), and on the other hand, 2. a locative ending $-(uu)\bar{o}$ (< IIr. $*-au$). It is possible that the Sanskrit ending may have arisen as a blending of the two IIr. case forms as continued in Avestan.

§ 16 Case Endings of the Plural

§ 16.1. The nominative masc./fem. has $-\bar{o}$, whose reconstruction goes back to PIE $*-es$, as its ending. Two other endings also exist. 1. An ending that is the product of morphological recharacterization: $-\check{a}\eta h\bar{o}$, which must have its origin in the Indo-Iranian period: cf. Skt. $-\check{a}sas$, OP $-\check{a}ha$. 2. The thematic inflection has an ending $-\check{a}$ (in YAv., $-a$ in polysyllables, but $-\bar{a}$ in the auslaut of disyllables before

the enclitic *-ca*), which must have been long in IIr., as is evident from *-ā́* in Skt.: *yugá́* ‘yokes’. This form could derive from the old ending of the collective, PIE **-h₂*. The existence of an ending that results from the PIE contraction **-o+-es*, as is found in *-ās* in Sanskrit, is not assured. One should note the fem.pl. of the *ā*-stems: *-ā́* < IIr. **-ās* < PIE **-eh₂-es*.

§ 16.2. The accusative masc./fem. has an ending *-ō*, deriving from Ir. **-as* < PIE **-ns*. The thematic inflection takes the same ending, but according to the rules of syllabification, the ending is realized after a vowel as PIE **-ns*. The Ir. ending **-a-ns* becomes *-āng* in OAv. and *-q* or *-ā* in YAv.; cf. § 7.9.3. In some cases, particular phonetic developments have substantially disfigured the ending, cf. § 7.17.7.

§ 16.3. The nominative/accusative neuter has both 1. an ending *-ī́* and 2. a zero ending with lengthened grade of the element preceding the ending, as a formal characterization (cf., for example, § 18.4). 3. The thematic inflection has an ending *-ā́* in Av., which can be taken back to Ir. **-a-H*. The underlying ending is PIE **-h₂* > IIr. **-H*, which has either become *-i*, lengthened the vowel, or disappeared.

§ 16.4. The vocative pl. is formally identical to the nom.acc.pl., for both animate and the neuter nouns.

§ 16.5. The genitive has an ending *-qm*, coming from **-ām*. The inflectional classes ending in a vowel show an innovative ending *-nqm*, made by analogy to the *n*-stems. In contrast to the other Indo-Iranian languages, Avestan exhibits a short stem vowel in these forms.

§ 16.6. The dative/ablative has an ending *-biüō*, which appears as *-biias-ca* before an enclitic. This ending is equivalent to the Skt. *-bhyas*.

§ 16.7. The instrumental has an ending *-biš*, Skt. *-bhiḥ*. In some very good manuscripts, *-biš* is also found. In certain cases, special phonetic developments have substantially altered this ending, cf. § 11.1.4. In contrast to the other inflectional types, the thematic inflection shows an ending **-āiš*, Skt. *-aiś*.

§ 16.8. The locative exhibits assorted allomorphs for its ending, which all developed from the ending **-su*, depending upon the environment in which it falls (i.e., RUKI, etc.): *-šu*, *-su*, and *-hu*. Furthermore, the extension of the loc.pl.

through the addition of the postposition *ā* (just as in the loc.sg. and the abl.sg.) is commonplace.

§ 17 Inflectional Classes

Every noun in Avestan can be morphologically classified according to the stem formant that it possesses. Internal to each inflectional class, further types may sometimes be distinguished on the basis of particular inflectional behaviors, the origin of which is normally to be sought in ablaut patterns.

Not every inflectional class has subdivisions, but those considered to be the oldest from the point of view of Indo-European inflection indeed do; such classes must therefore be regarded as archaisms in Avestan. The enormous variation entailed not only by the shifting of the accent, but also by the alternation of vowels in the constituent elements of the word, could have already been regularized very early in favor of a single invariable stem with fixed accent. Of all of the types that have been verified as part of Proto-Indo-European inflection with greater or lesser reliability, Avestan has preserved but a tiny remnant, which is clearly disappearing due to regularization.

The two most important types that have been preserved are the proterodynamic and the hysterodynamic. In the proterodynamic type, the root takes the accent in the direct cases, while the suffix receives the accent in the oblique cases. In the hysterodynamic type, the suffix takes the accent in the direct cases, while the ending receives the accent in the oblique cases. As a general rule, the direct cases (also referred to as 'strong') are the nom. of all numbers, the acc.sg. and du., and the loc.sg.; the remaining cases are oblique (also referred to as 'weak'). Keep in mind that the accent and full grade are usually linked (cf. § 13.2). Other types of inflectional patterns will be commented on under the corresponding entries.

In general, inflection can be divided into stems ending in a consonant and stems ending in a vowel, which in some cases are the continuants of old consonant stems (i.e., laryngeal stems).

The forms given in the tables below belong solely to Young Avestan, except where expressly indicated to the contrary using *italics*.

§ 18 Consonant Stems

Consonant stems include an enormous number of stems of diverse nature, but the endings are added to a consonantal element in all of them. The subgroups

TABLE 6 *The inflection of root nouns*

	Singular		Dual		Plural		
	m./f.	neut.	m./f.	neut.	m./f.	neut.	
nom.	dru ^š	as-ca	āpa	asta-ca	āpō spasō		
voc.	narə				apō vīsō		asti
acc.	āpəm						
gen.	dri ^j ō		narā ^š		apam vīšam		
abl.	druja ^č		nərəbiia		aiβiiō vižibiū		
dat.	sarōi ape						
inst.	vərədā apa						
loc.	sairi višii				nāšū		

into which consonant stems may be divided are **a.** root nouns (with assorted final consonants) and **b.** derived stems, which, in turn, include stems in *-t* and *-ant*, stems in *-an*, *-man*, and *-uuan*, stems in *-ar*, and stems in *-ah* and *-uuāh/-uš*.

§ 18.1 *Root Nouns*

Root nouns constitute an important and archaic class of nouns, characterized by the fact that the stem is equal to the root. The final element of the stem is a consonant (*-c*, *-j*, *-t*, *-d*, *-θ*, *-p*, *-m*, *-n*, *-r*, *-z*, *-š*, *-h*), though some other stems having a final vowel (*-ā*, *-ī*, *-ū*), which were originally consonantal (< **H*), may be included in this class as well.

The majority of these nouns belongs to the animate class (above all feminines), though some neuters are met with as well. Note further that a good number of root nouns are the second members of compounds.

Words belonging to this class are: *vac-* m. 'voice', ^o*hac-* 'following'; *druj-* f. 'lie'; *ast-* neut. 'bone', *ābərət-* 'carrier', *stūt-* f. 'praise'; *paθ-* m. 'path'; *pad-* m. 'foot', *vərəd-* f. 'growth', *zərəd-* neut. 'heart'; *ap-* f. 'water', *kəhrp-* f. 'body'; *dam-* m. 'house', *zam-* f. 'earth', *zim-* m. 'winter', *ham-* m. 'summer'; *span-* m. 'dog', ^o*jan-* 'slayer'; ^o*kar-* 'who does X, -er', *gar-* f. 'greeting', *nar-* m. 'man', *sar-* f. 'union', *star-* m. 'star'; *nās-* f. 'wait', *vīs-* f. 'tribe, village', *spas-* 'spy'; *dərəz-* f. 'tether, binding', *bərəz-* 'high', *maz-* 'great'; *tš-* f. 'vigor'; *āh-* neut. 'mouth', *māh-* m. 'moon, month'.

Some examples of root nouns terminating in a vowel are: *ādā-* f. 'delivery', *xā-* f. 'well', *maz-dā-* m. 'Mazdā', ^o*stā* 'standing'; *xšī-* f. 'lament', ^o*jī-* 'with life', ^o*frī-* 'pleasing'; ^o*sū-* 'thriving'.

N.B. The inflection of these stems is very similar, taken as a set, but at times it shows some deviations, which may be the result of a special phonetic

treatments or of morphological processes (ablaut). The details of the actually occurring divergences and possible anomalies will be given in the following overview.

Singular: 1. The nom.sg. has the ending *-s* in animate stems, with the conditioned variant *-š*: Av. *vāxš* (with lengthened grade; Skt. *vák f.*), *druxš* (§ 11.20.5); YAv. *ābərəš*; YAv. *kərəfš* (§ 11.21.5). Root nouns ending in a vowel are also sigmatic: *xā*, *°stā*, *mazdā*, *pañtā*² (< **-ā-s* < **-aH-s*; § 7.5.2); *ərəžə-jiš*, *ratu-friš*. Root nouns in a sibilant are sigmatic: YAv. *vīš* (Skt. *vít*), *spaš* (§ 11.21.4; Skt. *spát*), OAv. *dərəš-cā*, YAv. *barš* (§ 11.20.5); *mā* (Skt. *más*). The nom.sg. of root nouns in *-n* is usually considered to be asigmatic, in spite of some evidence to the contrary: YAv. *°ja* (OAv. hapax *vərəθrajā* [with vv.ll.]; Skt. *°há*) versus *°já*, YAv. *spā* (Skt. *śvā*). Root nouns in *-r* are asigmatic: OAv. *nā*.—**2. The acc.sg.** has the ending *-əm* in animate stems: Av. *vācəm* and YAv. *vācim* (with LG from a FG **o* [cf. the gen., coming from a FG **e*]; Skt. *vācam*, Lat. *uōcem*), OAv. *drujəm* (Av. *drujam* and YAv. *drujim*; § 7.14.4); YAv. *ābərətəm*, *pādəm* (LG, cf. Lat. *pēs*, versus the FG **o* in the pl.; Skt. *pādām*); *āpəm* (LG), OAv. *kəhrpəm* (YAv. *kəhrpəm*). Root nouns in *-m* present some problems, because they seem to lack a formal marker of the acc. due to the fact that acc. **-m* merged with the **-m*- of the stem before the Ilr. sequence **-m-m* could have become **-m-am*: Av. *zqm* (cf. also Skt. *kṣám*), YAv. *ziiqm*; *°janəm* (Skt. *°hānam*), *spānəm* (§ 7.4.6; Skt. *śvānam*); Av. *narēm* (Skt. *nāram*), *sarēm*; *višəm* (Skt. *višam*), YAv. *spasəm*, *bərəzəm*, OAv. *išəm*; YAv. *māñhəm* (cf. § 7.5.1; Skt. *māsam*). Vowel stems: *°stqm*, Av. *mazdqm*, YAv. *pañtqm* (Skt. *pāñthām*; also YAv. *pañtānəm*); *yauuaē-jim*, *°sum*.—**3. The voc.sg.** has a zero ending: YAv. *narə* (with FG); ending in a vowel: OAv. *mazdā*.—**4. The nom./acc.neut.** has a zero ending: YAv. *as-ca* (hapax < **ast-ca*; more frequent is *astəm* [!])—**5. The gen.sg.** has the ending *ō* (< **-as*, but cf. § 7.13.1): YAv. *vacō*, *drujō*; *ābərətō*, *astō*, Av. *paθō* (cf. fn. 2 below); *āpō* (Skt. *apás*). Among root nouns in *-m*, a genitive ending with ZG may be found: OAv. *dəng* (< **daNs*; § 7.9.3), in a formation very similar to the proterodynamic genitives of *n*-stems (§ 18.4); cf. also OAv. *adqs* (< *ā dqs?*, abl.), versus Av. *zəmō* (Skt. *jmás*) and YAv. *zimō* (and *zəmō*); *°γnō* (Skt. *°ghnás*), *sūnō* (Skt. *śúnas*). Traces of ablaut remain in root nouns in *-r*: cf. *garō* versus *nərəš* (YAv. *narš*; Skt. *narás*); old and similar to the *r*-stems (§ 18.5) are OAv. *sarō* (also *sarə*), YAv. *vīšō* (Skt. *viśás*), OAv. *mazə* (abl.),

2 The inflection of this noun in Avestan seems to be composed of two suspiciously similar stems: *paθ-* and *pañtā-*. Both stems are explicable through sound change. The stem that underlies the Avestan stem would be PIE **penth₁-* or **ponth₁-*, whose Av. nom.sg. *pañtā* comes from Ilr. **pántaHs*; cf. Skt. *pāñthās* (where the *th* is secondary by analogy to the oblique cases), while the gen.sg. *paθō* comes from Ilr. **pñtHás*; cf. Skt. *pañthás*. The exact PIE etymology of this noun is disputed.

bərəzō; YAv. *māñhō*, OAv. *āñhō* (Skt. *āsás*). Vowel stems: Av. $^{\circ}$ *štā́*, *mazdā́*.—6. The **abl.sg.** is, in Old Av., identical to the genitive, but in Young Avestan, it has replaced *-s/h by -t following the thematic inflection (§ 19.16.): *āpaṭ*, *zəməṭ* (also *zəməḍa*); *vīsaṭ*; γ *naṭ*.—7. The **dat.sg.** has as its ending (< PIE *-eḷ) OAv. -ōi and YAv. -e, the latter reintroduced into OAv. as -ē (§ 14.6): *ābərəte*; *ape* (*apaē-ciṭ*); γ *ne* (Skt. γ *ghné*), *sūne* (Skt. *śúne*); *gairē*, *narōi* (YAv. *naire*; Skt. *naré*), *sarōi*; *vīse* (Skt. *vīśé*), *mazōi*. Vowel stems: $^{\circ}$ *štāi*, $^{\circ}$ *šte*; *ərəžə-jiūi*.—8. The **inst.sg.**: *vaca* (Skt. *vācā́*); *zərədā-cā*, *paṭa*; *apa* (Skt. *apā́*), *kəhrpa*; *zəmə*, *hama*; *vīsa* (Skt. *vīśā́*), *dərəzā*; OAv. *əāñhā* (YAv. *āñha*; Skt. *āsā́*).—9. The **loc.sg.** has the ending -ī, to which the postposition *ā* can be added. In some cases, a locative with a zero ending, but formally marked through ablaut, is detectable. Examples: *paiθī*; *kəhrpiia*; *dqm* (< $^{\circ}$ *dām*, YAv. *dqmī*), *zəmə* (< $^{\circ}$ *-ai*; Skt. *jmay-ā́*, Gr. $\chi\alpha\mu\alpha\iota$) and *zəmi* (Skt. *kṣāmī*); *vīsi* (Skt. *vīśi*) and *vīsiia* with postposition.

Dual: 10. The **nom./acc./voc.du.**: *ābərəta*; *pāda*, *āpa* (Skt. *āpā́*); *spāna* (Skt. *śvánā́*).—11. The **nom./acc./voc.neut.du.**: *asta-ca*.—12. The **gen.du.**: *narā́* (Skt. *nārā́*).—13. The **abl./dat./inst.du.**: *vayžibiū-ca*; *nərəbiia*.

Plural: 14. The **nom.pl.** has the ending -ō < $^{\circ}$ *-as* < PIE $^{\circ}$ *-es*. Although the nom.pl. is considered a direct case while the acc.pl. is considered oblique, it is not infrequent to find an acc.pl. that is formally a nom.pl. However, both cases are clearly differentiated in those stems which show ablaut: *vācō*; *ābərətō*; *āpō* (Skt. *āpās*); *zəmə* (Skt. *kṣāmas*), *zimō*; $^{\circ}$ *janō* (Skt. $^{\circ}$ *hānas*), *spānō* (Skt. *śvánas*); *narō* (Skt. *nāras*); *spasō*; *išō*; *māñhō*; vowel stems: *xā́*, $^{\circ}$ *štā́*, *pañtānō*; *ratu-friiō*.—15. The **acc.pl.** has the ending -ō < $^{\circ}$ *-as* < PIE $^{\circ}$ *-ns*: *vacō*; *paθō*, *padō*. Among labial-stem root nouns, the OAv. hapax *apō* (with FG as in Skt. *apās*) stands out in contrast to YAv. *āpō* (with generalized LG), *kəhrpas-ca*; *zəmas-ca*; $^{\circ}$ *janō* (Skt. γ *ghnās*); *garō*, *nərəš* (Skt. *nṛ́ṇ*); *vīsō* (Skt. *vīśas*), *išō*, *māñhō*. Vowel stems: *yauuaējiū*.—16. The **nom./acc./voc.neut.pl.**: *asti*.—17. The **gen.pl.**: *astqm*, *paθqm*; *apqm* (Skt. *apām*), *kəhrpam*; *zəmqm-ca*; γ *naqm*, *sunqm* (Skt. *śúnām*); *narqm* (Skt. *narām*), *strēm-cā* (YAv. *strqm*); *vīsqm* (Skt. *vīśām*); vowel stems: *xqm*.—18. The **abl./dat.pl.**: *aiβiū* (*ap-*; Skt. *adbhyás*); *nərəbiias-cā* (Skt. *nṛbhyas*) as well as YAv. *nərəbiū*, *nəruiū* (§ 11.1.4); *vīžibiū* (Skt. *viḍbhyás*), *vāyžibiū* (Skt. *vāgbhyás*). Vowel stems: *yauuaējibiū*.—19. The **inst.pl.**: *azdibiš*, *padabiš* (*paθ-*), *garōibiš*, *mazibiš*, *vayžibiš* (Skt. *vāgbhiḥ*).—20. The **loc.pl.**: vowel stems: *ratu-frišu*.

§ 18.2 Stems in -t, -aṇc

Among the dental stems, there are some nouns with the suffixes -t- and -tāt-, used to create abstract nouns, such as *aməratātāt-* f. ‘immortality’, *hauruuatāt-* f. ‘wholeness, perfection’, *yauuaētāt-* f. ‘eternity’. Ablaut is found in the inflection of some nouns: cf. *napāt-* m. ‘grandson’, and the directional adjectives in

*-*anc*,³ derived from adverbs, such as *apānc-* ‘apart’, *frānc-* ‘forward’, *niūānc-* ‘downward’.

The inflection of these invariable stems can be inferred from Table 6 in § 18.1. The forms of *napāt-* are nom.sg. *napā* (**napāts*), acc.sg. *napātəm*, gen.sg. *naptō*, and loc.pl. *nafšu* (**napsu*).

For the **anc*-stems, the following forms may be adduced: nom.sg.m. *apaš* < **apa-ank-š*, *fraš*, acc.sg. m. *niūāncim* (with analogical **ā*, cf. Skt. *nyāñcam*), the inst.sg. *apāca* (Skt. *apāca*), and the nom.pl.m. *niūāncō*.

§ 18.3 Stems in -nt

This formant is found in the present active participle in *-ant*, with an invariable stem in the case of thematic verbs: *jasant-* ‘coming’, *jaiđūiant-* ‘praying’. Athematic verbs, meanwhile, exhibit ablaut: *surunuuant-/surunuuat-* ‘listening’, *hənt-/hat-* ‘being’. Possessive adjectives in *-uuant-/uuat-* (IE **-uent-/*-uñt-*) and *-mant-/mat-* (IE **-ment-/*-mñt-*), and some adjectives in *-ant*, are to be included here as well: *bərəzant-* ‘high’, OAv. *drəguuant-*, YAv. *druuant-* ‘wicked’, *fšumant-* ‘having cattle’.

With regard to inflection, note that the athematic nom.sg.m. ends in *-ō* in YAv., which must be explained from an ending **-as* < IIr. **-at-s*. In thematic stems, the ending **-ant-s* is reflected in YAv. as *-q* (*-ō* when denasalized) and in OAv. as *-qs*. While YAv. *-q* is the outcome of the phonetic development of IIr. **-ans* (cf. §§ 7.9.3, 7.17.3, 19.1.16), OAv. *-qs* reflects the analogical restitution of the stem *-ant* from the oblique cases. Keep in mind that, in these stems, the masc. and fem. nom.acc.sg. are considered direct cases (cf. § 17), but the neut. nom.acc.sg. inflects as an oblique case, cf. *cuuat* ‘how much’. In **-mant-* and **uant-*stems, analogy to the stems in *-uuāh/-uš* has induced the substitution of the nom.sg. in **-uant-s* (e.g., *cuuqs* ‘how much’) by **-uās* and **-mās* (e.g., *astuuā* ‘bone (→ material)’, *xratumā* ‘intelligent’). Note similarly the voc.sg. *druuō* < **drug^h-uas* ‘wicked’.

§ 18.4 Stems in -an, -man, -uuan, -in

The suffix *-n-*, originally individualizing in function, occurs directly affixed to the verbal root (e.g., *tašan-* ‘shaper, creator’, Skt. *tákšan-*), but also in the compound suffixes **-man*, **-uan*, **-Han*, or *-in*. The last two have possessive value and almost always form adjectives. Some examples are *cašman-* ‘sight’ (Skt. *caś* ‘see’), *nāman-* ‘name’, *ašauuan-* ‘truthful’ (from *aša-* ‘order, truth’), *mąθrān-* ‘knowing the *mąθras*’ (**mąθra-Han-*), *kainīn-* ‘girl’ (**kani-Hn-*), *parənin-* ‘with

3 With the PIE suffix **-h₃k^h* ‘looking towards’; the nasal was introduced in Indo-Iranian.

feathers' (from *parəna-* 'feather'), *zruuan-* 'time' (from PIE **ǵr̥h₂-uēn-*, cf. Gr. γέρων 'old man').

With the exception of the *in*-stems, all of these stems have an ablauting inflection, which can considerably alter the appearance of the word. The nom.sg. regularly has LG and loses the final nasal: OAv. *uruuā*, YAv. *uruua* 'spirit', *kaine* (Skt. *kanīyā*). The other direct cases show an alternation between FG (acc.sg. *asmanəm* 'sky', nom.pl. *ašauuanō*) or LG (acc.sg. *tašānəm*, nom.pl. *marātānō* 'mortals') as the result of BRUGMANN (§ 7.4.6) or of **H*.

The acc.sg.neut. has ZG (*nqma* 'name'). In the gen.sg., the endings **-n-as* (> *-nō*) and **-an-s* (> *-āng*, *-q*): OAv. *mąθrānō*, YAv. *tašnō*; OAv. *cašmōng*, YAv. *dāmaq̄n* (← **dāmq̄*), *zrū* (§ 7.17.3). The abl.sg., besides the forms that are identical to the gen., shows other innovative forms, such as YAv. *cašmanaṭ* or *barəsmən* 'sacrificial straw', which exhibits the YAv. substitution of original **-an-s* by **-ant* > **-ənt* > *-ən*. There are also ablaut variants in the nom.acc.pl.; furthermore, a hypercharacterizing **-i* may be found after the ending. Thus, the following endings occur: *-qm* < **-ām* (after labial consonants) ← **-ān* (cf. Skt. *kármā*): OAv. *anašmq̄m*, *dāmq̄m* 'creatures' (cf. § 11.3.3); *-āni* (cf. Skt. *kármāṇī*): OAv. *ašmānī*, YAv. *cinmāni* 'desires' (cf. the types such as OP *taumani*, Lat. *nōmina*, OCS *imena*); *-anī* (originally dual? cf. Skt. du. *kármāṇī*): OAv. *nāmānī* 'names'.

Note also that *ašauuan-* has a lengthened presuffixal vowel in some cases (cf. Skt. *ṛtāvan-*, OP *artāvā* < **ṛtāuan-*), especially in OAv.: gen.sg. OAv. *ašāunō* (**artā-un-as*) versus YAv. *ašāonō* (**arta-un-as*; made by analogy to the short vowel of the nom.), but voc.sg. YAv. *ašāum* (**artā-un*). As for stems in *-in* (cf. Skt. *hastín-* 'with hands'), the nom.sg. has *-ī* (from **-īn*), while the other case forms show the regular stem in *-in*.

§ 18.5 *r*-stems

This group is composed of kinship nouns in *-(t)ar*, nomina agentis in *-tar*, as well as a few other isolated stems. Examples: *pitar-* 'father', *mātar-* 'mother', *brātar-* 'brother', *x'vəṇhar-* 'sister', *zaotar-* 'priest' (Skt. *hótar-* 'pourer'), *nar-* 'man', *star-* m. 'star', *ātar-* neut. 'fire' (on root nouns in *-r*, cf. § 18.1).

The nom.sg. has LG and is asigmatic. The final **-r* seems to have been lost already in the IIr. period: *x'vəṇha*, Skt. *svásā*. The nom.sg. *ātars̄* constitutes an exception, both because it is a sigmatic nominative and because it has an acc.sg. with ZG of the suffix, YAv. *ātrəm*. In the animate nouns, the direct cases show the same alternation between FG and LG of the suffix that is seen in the *n*-stems, which can be attributed to the effects of BRUGMANN (§ 7.4.6), e.g., *pitarəm* versus *dātārəm*. The two distinct forms of the gen.sg. in **-r-as* and in **-ar-š* (< **-r-š* > Skt. *-ur*), alongside the abl.sg. in **-t̄*, *nəṛəṭ* 'from the man', are also found here. On the acc.pl. in **-r-nš* (*nəṛəš*, *strəš*), cf. § 7.7.

§ 18.6 *r/n-stems (Heteroclites)*

These stems make up a small number of neuter nouns that are usually called 'heteroclites' because they alter the final segment of the stem throughout their inflectional paradigm: a stem in *-r* in the nom.acc. and a stem in *-n* in the oblique cases. This class goes back to Indo-European; cf. Gr. ὕδωρ, ὕδατος (< *-*ntos*) 'water', Lat. *iecur*, *iecinoris* 'liver'. Nouns belonging to this class include *huuarə* 'sun, eye', *aiiarə* 'day', *yārə* 'year', *yakarə* 'liver' (though of the latter two, no *n*-stem forms are attested in Avestan), but also nouns derived using the stem *-*uer/uen-*, such as *θanuuarə* 'bow' (Skt. *dhánvan-*), *karšuuarə* 'section of the world' (*karš* 'cut').

Some noteworthy forms of the paradigm follow here. The gen.sg. in *-*an-s* gives different outcomes in each variety: OAv. *xʷəng* < **huuanh*⁴ (cf. § 11.30), YAv. *hū* < **huuanh* (§ 7.17.3), *aiiqn* (v.l. of *aiiq*) < **aianh* (§ 7.9.3). Intraparadigmatic analogy (cf. the nom.sg. Ilr. **suHar*) resulted in the YAv. gen.sg. *hūrō*. Various formations occur in the nom.acc.pl.: 1. with LG of the stem terminating in *-r* especially in OAv: *aiiārə*, *saxʷārə*. This formation is very archaic, judging from the Anatolian evidence: Hitt. *uttār* 'words'; 2. in *-n*: *aiiqn*, *karšuuqn*; and 3. in *-*ani* (< PIE *-*enh*₂): OAv. *sāxʷəni*, YAv. *baēuuani*.

§ 18.7 *h-stems*

This class includes the PIE neuter **s*-stems and adjectival compounds based on *s*-stems, e.g., *auuah-* 'aid', *manah-* 'spirit', *vacah-* 'word', *zraiih-* 'lake, sea', *humanah-* 'benevolent, of good spirit', *anaocah-* 'unaccustomed to'. This class also includes comparative adjectives formed with the suffix *-*iah-* (cf. § 20.1): *vahiih-* comparative of *vohu-* 'good', as well as some isolated nouns: *ušah-* f. 'dawn', *biih-* m. 'fear'.

The suffix has FG in in all case forms, apart from the nom.sg. of animates and the nom.acc.pl. of the neuter, which end in *-*āh*, e.g., nom.sg.masc. *ušā*, OAv. *vačiūā*, YAv. *vañhā* 'better' (versus Skt. *váśyān*; cf. further § 18.8), nom.acc.pl. neut. *raocā* 'lights'. The nom.sg.neut. ends in *-*ah* > *-ā*/*-ō*: OAv. *vacā*, OAv./YAv. *vacō* (Skt. *vácas*); OAv. *nəmā*, YAv. *nəmō* (Skt. *námas*), etc. On the development *-*ah* > *-ā*, cf. 7.9.4.

An ending *-*āhi* is attested in the nom.acc.pl. neuter, e.g., OAv. *varēcā.hicā*. The animate acc.sg. shows various ablaut grades: *-*ah-am* and *-*āh-am*, which are once more explained by BRUGMANN (§ 7.4.6): *ušāñhəm* but *vañhanhəm*.

4 This noun comes from PIE **seh*₂-*ul-*/**sh*₂-*uen-*, i.e., a heteroclite in *-l/n-*.

§ 18.8 Stems in -uuāh/-uš, -iš, -uš

The perfect active participle was formed with the ablauting Indo-European suffix $*-\mu\acute{o}s/-\mu\acute{o}s/-u\acute{s}$, from which both the nom.sg.m. (IE $*-\mu\acute{o}s$) as well as the other direct cases (IE $*-\mu\acute{o}s-$) come to have persistent LG in Avestan, due to BRUGMANN (§ 7.4.6). The oblique cases have the ZG $-u\acute{s}$. The motion feminine shows $-u\acute{s}-\bar{i}$; § 19.3. Some examples are $\bar{v}iduu\bar{a}h/\bar{v}idu\acute{s}$ - to *vid* 'know' or $\bar{v}auuanuu\bar{a}h/\bar{v}aonu\acute{s}$ - to *van* 'win, be superior'. The nom.sg.m. does not have the nasal that is characteristic of the perf.part.act. of Skt.: OAv. $\bar{v}iduu\bar{a}$, YAv. $\bar{v}iduu\bar{a}$ (Gr. εἰδῶς) versus Skt. $\bar{v}idv\bar{a}n$ (cf. also § 18.7). Late forms of the nom. of the sort YAv. $\bar{z}azuua$ 'which has left behind' could have arisen by analogy to the *n*-stems (§ 18.4). The acc.sg.m. is YAv. $\bar{v}iduu\bar{a}n\bar{h}am < *-\bar{a}sam$, in contrast to Skt. $\bar{v}idv\bar{a}m\bar{s}am$.

A small number of neuter nouns in $-i\acute{s}$ and $-u\acute{s}$ have an invariable stem throughout the paradigm, e.g., $\bar{t}auui\acute{s}$ - 'force', $\bar{h}adi\acute{s}$ - 'seat', $\bar{a}r\bar{e}du\acute{s}$ - 'wound'.

§ 19 Vowel Stems

§ 19.1 a-stems

This inflectional type is usually referred to as the 'thematic inflection', on account of the fact that the stem ends with the thematic vowel $-a-$ < PIE $*-e/o-$. The thematic inflection is extremely common, and includes a large number of masculine and neuter nouns, as well as adjectival forms in those genders. Some masc. nouns belonging to this class are Av. $\bar{a}hura-$ 'lord', YAv. $\bar{d}axma-$ 'morgue', Av. $\bar{m}a\acute{s}iia-$ 'mortal', Av. $\bar{m}a\thetara-$ 'formulation', $\bar{y}asna-$ 'sacrifice', YAv. $\bar{v}ira-$ 'man', Av. $\bar{z}asta-$ 'hand', YAv. $\bar{h}aoma-$ 'haoma'. Some neuters are Av. $\bar{a}\acute{s}a-$ 'truth' (sg. only), Av. $\bar{u}x\delta a-$ 'word', Av. $\bar{x}\acute{s}a\thetara-$ 'dominion, power', Av. $\bar{m}i\thetara-$ 'contract'; OAv. $\acute{s}iia\thetaana-$ (YAv. $\acute{s}iia\thetana-$) 'act, deed'. Some adjectives are Av. $\bar{a}ka-$ 'bad', Av. $\bar{a}m\acute{e}\acute{s}a-$ 'immortal', Av. $\bar{v}ispa-$ 'all', $\bar{h}auruua-$ 'whole'.

The inflection of thematic nouns is significantly different from the inflection of consonant stems, and it is common to find endings of pronominal origin. Recall that the inflection of neuters differs only in the nom./acc., and is identical to the masculine in all other case forms.

N.B.: *Singular:* **1. The nom.sg.** was OAv. $-\bar{e}$ (< $*-ah < *-as$; cf. §§ 7.9.4, 7.13.1), but in YAv. this ending further developed into \bar{o} . When followed by an enclitic, the older form of the nom.sg. is preserved in both varieties: $\bar{k}as-\bar{c}\acute{i}\bar{t}$, $\bar{g}aiias-\bar{c}\bar{a}$, $\bar{y}as-\bar{c}\bar{a}$, $\bar{y}asnas-\bar{c}a$, etc.—**2. The voc.sg.m/n.** has an ending $-\bar{a}$: OAv. $\bar{a}hur\bar{a}$, YAv. $\bar{a}hura$ (Skt. $\bar{a}sur\bar{a}$); neut. OAv. $\bar{a}\acute{s}\bar{a}$.—**3. The acc.sg.** has the ending $-\bar{e}m$ in YAv. The original form of the OAv. ending is $-\bar{e}m$, which came to be replaced by $-\bar{e}m$ in many instances: cf. doublets such as OAv. $\bar{d}\bar{a}\bar{\theta}\bar{e}m$ and $\bar{d}\bar{a}\bar{\theta}em-\bar{c}a$ (to

TABLE 7 *The inflection of a-stems*

	Singular		Dual		Plural	
	m./f.	neut.	m./f.	neut.	m./f.	neut.
nom.	ahurō	aṣəm	ahurǎ	šii̯aoθanōi saite	ahurāṅhō mašiiā	uxδā xšaθra
voc.	ahurǎ					
acc.	ahurəm mašim				mašiiāṅg zastē haoma	
gen.	ahurahiiā ahurahe		vīraiiā		šii̯aoθ(a)nanəm	
abl.	aṣāt		zastōibiūā ahuraēibiia		yasnōibiiō	
dat.	ahurāi				aməṣāēibiio	
inst.	ahurǎ				šii̯aoθnāiš	
loc.	yesnē		zastaiiō		vīspaēšū daxmaēšuuā	

the adj. *dāθa-* ‘suitable’), OAv. *parštəm*, YAv. *parštəm* (ppp. to *fras* ‘ask’). On the other hand, the vowel *ə* of the ending could undergo complete assimilation and contraction when in contact with a preceding *i* (§ 7.14.4) or *u* (§ 7.16.1), i.e., *-iiəm* > *-im*: OAv. *paouruuim* (YAv. *paoirim*; cf. § 8.2.), Av. *mašim*, Av. *yesnim* (but cf. *aniiəm*, acc.sg.m of *aniia-*); or in turn *-uuəm* > *-ūm*: YAv. *haurūm*, YAv. *θrišūm*, YAv. *drūm*. As part of this particular development, account must be taken of the endings *-aiam* and *-aum* themselves (cf. §§ 10.1.2, 10.3.3, resp.): *gaēm* (acc.sg. of *gaiia-* ‘life’; Skt. *gáyam*); YAv. *graom* (acc.sg. of *grauua-* ‘cane’); similarly, of the endings *-āiam* and *-āum* (cf. §§ 10.5.2, 10.6.2, resp.): OAv. *humāim* (acc.sg. of *humāia-*), YAv. *nasāum* (acc.sg. of *nasu-* ‘cadaver’ < **nasāuəm*).—

4. The nom./acc.neut is formally identical to the acc.sg.masc., and thus is unique within the paradigm, since it bears a formal mark of its gender.—**5. The gen.sg.** derives from a PIE ending **-osjo* > Iir. **-asja* > Ir. *-ahja*, which has its regular outcome in OAv. as *-ahiiā* and in YAv. as *-ahe* (§ 7.10.3). On the OAv. change experienced by the gen. ending before an enclitic, cf. § 11.28: *ašahiiā*, *spəntahiiā* versus *ašaxiiā-cā*, *spəntaxiiā-cā*.—**6. The abl.sg.** is distinct from the gen.sg. only in the thematic inflection, while in all other inflectional types, both cases exhibit the same form. OAv. has preserved this distinction, with an abl.sg. ending *-āt*, which is identical to Skt. *-āt*: Av. *dūrāt* ‘from afar’, Skt. *dūrāt*. YAv. also possesses the abl. ending *-āt*, but note that this ending has been analogically extended to other inflectional classes in YAv.; cf. §§ 18.1.6, 19.2.5, 19.3.5, etc. Preceding the enclitic *°cā*, the abl.sg. ending appears as *-āat-cā* in the majority of cases. The fact that this development does not occur preceding the enclitic *°cī* (*aṣātci*, *ahmāci*, *aētahmāci*) suggests that *-āat-cā* arose from an effort to distinguish it in pronunciation from the ending *-ā-cā*. In many cases, a shortening is observable in YAv. of *-āt* preceding the preposi-

tion *haca*: the two would form a single word, and shortening of the antepenultimate syllable would result (cf. § 7.3.1): *nmānaṭ haca*, *vahrkaṭ haca*, *spəntaṭ haca*.—7. **The dat.sg.** has the ending *-āi* (< **-ōi* < **-o+ei*) and exhibits slight dialectal variation. For its part, the OAv. ending can have an enlargement in *ā* (which is not the postposition that commonly appears in the loc.; cf. § 16.8, and below 9 and 21): *ahurāi.ā* (from **ahurāiā*, later separated during transmission), *yātāiīā* (to *yāta-* ‘prayer’; cf. further ch. 2, fn. 5). Similarly, in Sanskrit, the ending *-āya* occurs; it must be connected with the OAv. forms. Meanwhile, YAv. shows only the ending *-āi*.—8. **The inst.sg.** has the appearance of a zero ending, on account of the fact that the PIE ending **-h*, becomes IIr. **-H*, and in Avestan the length of word-final vowels is subject to phonological conditions depending upon the variety (§ 7.2).—9. **The loc.sg.** had, in the thematic inflection, an ending *-i*, which fused with the thematic vowel: PIE **-oi* > IIr. **-aj*: cf. Gr. οἶκοι versus nom.pl. οἴκοι. This ending has various outcomes in Av.: OAv. shows *-ōi* and *-ē*: *xšaθrōi*, *šūiaoθanōi*, *x^vaθrē*. The ending properly belonging to YAv. is *-e*, which was introduced and adopted in OAv. (§ 10.2.2): *šūiaoθane*. Before enclitics, the outcome *aē* is found (§ 10.1.1): *aspaēca*, *vīspaēcā*. The loc. can take the postposition *ā*: OAv. *xšaθrōi.ā*, *x^vāθrōiīā*, YAv. *zastaiia*, *nmānaiia-ca*.

Dual: 10. The nom./acc./voc.m. has an ending *-ā*, which comes from Ir. **-ā* < PIE **-o-h*; OAv. *spadā*, YAv. *zasta*; cf. Skt. *hástā*, *devā́* (but in Skt., an ending *-au* also exists), Gr. λύκω.—11. **The nom./acc./voc.neut.** has an ending OAv. *-ōi*, YAv. *-e*, which comes from IIr. **-ai* < **-o-ih*; OAv. *šūiaoθanōi*, YAv. *saiite*, *hazaṅre* (Skt. *śaté*, *sahásre*), (f.) *uiie* (Skt. fem./neut. *ubhé* § 10.2.3).—12. **The gen.du.** has an ending *-aiiā* < **-aj-ās*, similar to Skt. *-ay-oḥ* < **-aj-ayš*, but in both the gen.du. and the loc.du., Avestan very likely has archaic endings which have been leveled into a single form in Skt.: OAv. *qsaiiā* (to *qsa-* ‘part’; Skt. *ámśayoh*); *rānaiiā* (to *rāna-* ‘?’); YAv. *dōiθraiiā*, *vīraiiā*; meanwhile—13. **the loc.du.** has an ending *-aiiō* < *-aj-ay*: OAv. *zastaiiō*, *ubōiūō* (Skt. *hástayoh*, *ubháyoh*), YAv. *⁺uuaiiō*.—14. **The abl./dat./inst.du.** comes out of an ending **-ajbiā* > OAv. *-ōibiiā*, YAv. *-aēibiia*: *zastōibiiā* (Skt. *hástābhyām*), *ubōibiiā* (Skt. *ubhábhyām*), *rānōibiiā*, *aspaēibiia*, *gaošaēibiia* (and *gaošaēibe*), *maēyaēibiia*. We also find the ending *-ābiia* in YAv. *pāšnābiia*, *dōiθrābiia*.

Plural: 15. The nom./voc.pl. of the thematic inflection in Avestan cannot, as in other IE languages, be derived from an ending **-ōs* < **-o+es*, but rather must be related to forms of the type Lat. *locus* (pl. *loca*), that is to say, reflect an old collective ending **-ā* < **-eh₂*: Av. *mašiiā*. The IIr. ending **-ās* < PIE **-o+es* would have given *-ā* in Av. (cf. § 7.5.2), but its presence in the texts cannot be ascertained. Nevertheless, a recharacterized ending *-āṅhō* < **-āsas* (> OP *-āha*), similar to Skt. *-āsas*, can be found in various instances: OAv.

zauuīštiiāṅhō, *vīspāṅhō*, (voc.) *mašiiāṅhō*, Av. *ahurāṅhō*.—16. **The acc.pl.** shows a number of endings, due to some specific sound changes. The OAv. ending is *-ēṅ* < **-ans* < PIE **-o-ns*, while that of YAv. is *-ē*, but *-q* after a nasal (cf. §7.9.3), though both forms of the ending are occasionally extended to other environments. Before enclitics, an ending *-qs°* is found: OAv. *mąθraqs-ca*, Av. *mašiiąs-ca*, *yasnaqs-cā*, YAv. *haomąs-ca*. In YAv., *-ās* also occurs before enclitics: *amāšās-ca*, *ciθrās-ca*, *vīspās-ca*. Curious is the YAv. form *aiiūās-cit*, with *-ās°* for *-qs°*. In addition, it is common in YAv. to find forms of the nom.pl. used in place of the forms of the acc.pl.—17. **The nom./acc./voc.neut.pl.** has an ending *-ā* < PIE **-eh₂*: OAv. *šiiāoθanā*, YAv. *šiiāoθna*, Av. *yesniū-cā*. Forms with an ending *-ā*, explicable as analogically borrowed from neuters in *-ah*, also exist.—18. **The gen.pl.** has the ending *-anqm*, deriving from **-ānām* (with analogical shortening of the first *ā*). The expected ending is found in YAv. *mašiiānqm*, probably preserved through an effect of the *-i-*. Finally, in contrast to the reconstructable ending **-ām*, IIr. shows an innovation in the form of a nasal inserted into the ending, which is originally the form of the gen.pl. in *n*-stems (§19.1.18): *yasna-n-qm*.—19. **The abl./dat.pl.** has as an ending OAv. *-ōibiūō*, YAv. *-aēibiūō*: OAv. *vīspōibiūō*, *uxδōibiūō* (Skt. *ukthēbhyas*), *miθrōibiūō*, YAv. *amāšāēibiūō* *spəntaēibiūō*, but forms with the ending *-aēibiūō* are also to be seen in OAv.: *dāθaēibiūō*, *marətaēibiūō*. Note that an *-i-* of pronominal origin (already in IIr.) is inserted between the thematic vowel and the ending. Before enclitics, the ending appears as *-aēibiūas°*, which exactly reflects the IIr. ending **bh₁ias* > Skt. *-bhyas*: *dātōibiūas-cā*, *vīspaēibiūas-ca* (Skt. *vīśvebhyas*).—20. **The inst.pl.** of the thematic inflection diverges from the rest of the case forms, in that it shows an ending *-āiš*, deriving from PIE **-ōis*: OAv. *zastāiš* (Skt. *hás-taiḥ*), *mąθrāiš*, Av. *mašiiāiš-cā*—21. **The loc.pl.** shows an ending *-aēšū* < **-aišū*: *nmānaēšū*, *mašiiāēšū* (Skt. *mártyeṣu*), *vīspaēšū*. Note the frequent addition of the postposition *ā* after the loc. (§16.8): *daxmaēšūua*, *°stānaēšūua* ‘stable’.

§19.2 *ā*-stems

The *ā*-stems make up a class of numerous feminine nouns, whose origin goes solidly back to the parent language. In effect, the *-ā* of the stem goes back to PIE **-ā* < **-eh₂*, a reconstruction that allows for the *ā*-stems to be historically connected to the ablauting *i*-stems (< **-ih₂*; *dev^í-*type), whose formal similarity is more than evident (cf. §19.3). The adjectives of the thematic inflection model their feminine forms after this inflection class. Some words that belong to this class are Av. *uruuarā*- ‘plant’, *gaēθā*- ‘living being’, *daēnā*- ‘religion’, *sāsnā*- ‘teaching’, YAv. *grīuuā*- ‘neck’, *vaθβā*- ‘herd, flock’, *zaoθrā*- ‘libation’.

TABLE 8 *The inflection of ā-stems*

	Singular	Dual	Plural
nom.	daēnǎ	ubē uruuairē	gaēθā
voc.	daēne		
acc.	daēnṇam		
gen.	daēnaiiā	uruuaraiiā	gaēθanṇam
abl.	daēnaiiāt	vaθβābiia	gaēθābiio gaēθāuuiio gaēθābiš
dat.	daēnaiiāi		
inst.	daēnǎ daēnaiiā		
loc.	griuuaiia	(= gen.du.)	gaēθāhū gaēθāhuua

N.B.: *Singular:* **1. The nom.sg.** has a zero ending and thus terminates in -ǎ, depending on the dialect (cf. § 7.2). Comparison with other languages (Skt., OP, Gr.) yields the reconstruction *-ā < *-eh₂.—**2. The acc.sg.** has an ending -ṇam < *-ām; cf. § 7.6.2.—**3. The voc.sg.** of this inflectional class reflects an IIr. ending *-aī (Skt. -e): *uruuairē* (cf. Skt. *aśve*). However, in contrast to this diphthongal ending in IIr, other languages show forms in -ǎ: Gr. νόμφα, δόξα, Umbr. *tursa* (nom. -o), which should not be compared to certain Av. forms in -ǎ in which the nom. performs the functions of the voc. Originally, the voc. was probably a case with a zero ending; in some languages (cf. above), it may be seen that, in this case form, the laryngeal disappeared, leaving behind coloration as its only trace; cf. further stems in -ī (§ 19.3.3).—**4. The gen.sg.** has an ending -aiiā < *-āiās, similar to the ending of other Iranian languages that also share the -ǎ-, versus other endings such as those of OP in -āyā and those of Skt. in -āyās. We suppose that the -ǎ- has been extended from the inst.sg. in -aiiā (cf. below and also § 7.3.2). Other languages present an ending that comes from PIE *-eh₂-es: cf. Dor. Gr. τιμᾶς, etc., and traces in Lat. *familiās*, *uiās*, Umbr. *tutas* 'city'.—**5. The abl.sg.** is identical to the gen.sg., but YAv. has adopted, just as in other inflectional classes, an ending -aii-āt formed after the thematic inflection (§ 19.1.6): *uruuaraiiāt*, *zaoθraiīāt*.—**6. The dat.sg.** has an ending -aiiāi < *-āiāi (on the -ǎ-, cf. the gen.sg.), comparable to -āyai of Skt.: *sūryāyai*, etc. Examples from other languages, such as Gr. χόρᾱ, Lat. *uiae*, or Oscan *deivai* allow for the reconstruction of an ending *-āi < *-eh₂-ei.—**7. The inst.sg.** has two forms: one, *daēnaiiā*, agrees with the corresponding Skt. forms in -ayā (and which, as has been mentioned, serves as a model for some oblique cases of the paradigm), and the other, *daēnǎ*, formed with just the pure stem plus the ending. Skt. also possesses both endings: *jihvā* and *jihvāyā*; the forms in -ayā are more common.

Dual: **8. The nom./acc./voc.du.** has an ending -ē, equivalent to Skt. -e: *ubhé* 'both', *śipre* 'cheeks'. It is usually reconstructed as PIE *-eh₂-ih₂.—**9. The**

gen./loc.du. shows an ending equivalent to Skt. *-áyoḥ*—**10. The abl./dat./inst. du.** has an ending that is only slightly different from that which Skt. presents in *-ābhyām* (§ 15.3).

Plural: 11. The nom./acc./voc.pl. exhibits an ending *-ā̃* from Ilr. **-ās* (< PIE **-eh₂-es*) > Skt. *-ās* (*priyās*, but also *priyāsas*). Before enclitics, this ending appears as *-ā̃s^o* (cf. ch. 2, fn. 2): *uruuarā̃scā̃*. The nom. and the acc. were identical in Indo-Iranian. Comparison reveals some languages with an equivalent ending: Skt. *pr̥tanās*, Goth. *gibos* (Germanic **-ōz*), and (Balto-Slavic) Lith. *mergàs*, while others show an ending deriving from **-āns* < **-eh₂-ns*: Cret. Gr. *σκι-αυς* (Attic-Ionic *σκιᾶς* < **-ans*), Lat. *uiās*, Umbr. *vitlaf* (Lat. *uitulās*), OCS *ženy*. One thinks of different dialectal (or already IE?) treatments of **-eh₂-ns*: in one group, the nasal was lost in this sequence, while in the other group, it was maintained (or restored?).⁵—**12. The gen.pl.** shows an ending in *-anqm* with short *-ǎ-*, in contrast to the other Indo-Iranian languages, which have an ending in *-ānām* (cf. §§ 7.3.1 and esp. 19.1.18). In the YAv. form *yanqnaqm(ca)*, the monosyllabic stem *ynā-* may have been restored.—**13. The abl./dat.pl.** shows an ending equivalent to Skt. *-ābhyas*. Before enclitics, the Av. ending appears as *-ābiias^o*: *uruuarābiiasca*, *zaoθrābiiasca*. The YAv. forms *gaēθāuuiiō* and *vōiynāuuiiō* exhibit the regular lenition explained under § 11.1.4.—**14. The inst.pl.** is formed in the usual fashion and is equivalent to the Skt. ending *-ābhiḥ*.—**15. The loc.pl.** is formed in the usual fashion with the ending *-hu* (Skt. *-su*). Note the frequent addition of the postposition *ā* after the loc. ending (§ 16.8), which took place sufficiently late so as not to show the development **-h₂-* > **-ŋ^h-* between vowels: (§ 11.31): *gaēθāhuua* (*gaēθāhū*), *gāθāhuua*.

§ 19.3 *ī*-stems

The *ī*-stems make up a class of relatively numerous and very productive feminine nouns, which were already present in the parent language. The stem exhibits an ablaut *-ī/-iīā-* in Avestan, which goes back to PIE **-ī-* < **-ih₂-* / **-iā-* < **-ieh₂-*. *ī*-stems are basically used to form motion feminines to athematic forms, i.e., to provide the corresponding feminine form to athematic nouns and adjectives (cf. § 20): e.g., YAv. *daēuuī-* ‘(evil) goddess’, *dāθrī-* ‘(female) giver’, *nāirī-* ‘woman’ (from *nar-*), *sūnī-* ‘bitch’ (from *span-*). Cf. further adjectival forms, especially stems in *-u*, *-a*, *-uant*, *-mant*, and participles in *-ant* and *-uš*, e.g., Av. *vaŋ^hī-* to *vohu-* ‘good’, *ašaonī-* to *ašauiuan-* ‘truthful’, *bauuaintī-* to *bauuant-* ‘becoming’, *ciciθušī-* to *ciciθbah-* ‘having perceived’.

5 From an IE sequence **-eh₂ns*, a realization **-eh₂ns* is normally to be expected, but in this sequence, the same development as in forms such as Gr. Ζῆν, βούν (βῶν); Skt. *dṛyám*, *gám*; Lat. *diem*, Umbr. *bum*, may have occurred, where **-e₂um* → **-ēm* (Lex STANG), i.e. **-eh₂ns* → **-āns*.

TABLE 9 *The inflection of ī-stems*

	Singular	Dual	Plural
nom.	aṣṣaoni̇	azi̇	aṣṣaoniš
voc.	aṣṣaoni̇		
acc.	aṣṣaonīm		
gen.	aṣṣaoniiā̇		aṣṣaoninaṃ
abl.	(YAv. barəθriiāt̄)		aṣṣaonibiiō
dat.	aṣṣaoniiāi		
inst.	vaṇviā̇		
loc.			xšaθrišu barəθrišuuā

N.B. Not all case forms are attested, for which reason there are gaps in the chart above. In the following notes, correspondences with Skt. will be indicated systematically.

Singular: 1. The nom.sg. has a zero ending, and so terminates in $-ī̇$, depending upon the dialect (§ 7.2). Comparison with other languages (Skt. $-ī$, Gr. $-ιῶ$) allows for the reconstruction of an ending $*-ī̇ < \text{PIE } *-ih_2$; cf. Skt. *devī̇*.—2. *The acc.sg.* has an ending $-īm$, cf. Skt. *devīm*, which must go back to $*-īm < *-ih_2-m$.⁶—3. *The voc.sg.* terminates in $-ī̇$, from which one cannot tell whether it is the original voc. form or rather nom. *pro voc.* Skt. shows an ending $-i$: *devi* $<< \text{PIE } *-ih_2$; on the loss of the laryngeal, cf. § 19.2.3.—4. *The gen.sg.* has an ending $-iā̇ < *-iās < \text{PIE } *-ieh_2-s$; cf. Skt. *devyās*.—5. *The abl.sg.* has, in YAv., an ending $-iā̇$, remodeled by analogy after the thematic declension (§ 19.1.6). In OAv. (and in the rest of the IE languages), it is identical to the genitive (cf. above).—6. *The dat.sg.* has an ending $-iāi$, which can be taken back to $*-iāi < \text{PIE } *-ieh_2-ej$; cf. Skt. *devyāi*.—7. *The inst.sg.* has an ending $-iā̇$; cf. Skt. *devyā* ($< \text{PIE } *-ieh_2-h$, with ZG?)—8. *The loc.sg.* is *devyām* in Skt.

Dual: 9. The nom./acc./voc.du. has an ending in $-ī̇$; cf. Skt. *devī̇*. The du. is not well attested in Avestan. Skt. has *devī̇* for the voc.du., *devībhyām* for the dat./abl.du., and *devyós* for the gen./loc.du.

Plural: 10. The nom./voc.pl. shows an ending $-īš$; cf. Skt. *devīḥ*. Its reconstruction is disputed, because the expected ending, parallel to the ending reconstructed for the $-ā$ -declension, would have been $\text{PIE } *-ieh_2-es$ (or $*-ih_2-es$), whereas $-īš$ can only go back to IIr. $** -iHs$. The case ending here has probably been subject to influence from the corresponding ending of the $-ā$ -inflection.—

6 In some other languages, however, there are also indications of a FG $*-ieh_2m$, cf. Goth. *mauja* to *mawi*.

11. The gen.pl. shows an ending *-inqm*, with *-ĭ-*, versus Skt. *devínām*; on the vowel shortening, see the ending *-anqm* of the *ā*-stems with *-ǎ-* (on this change, cf. § 19.2.12). The form *vaŋ^hhīnqm* owes its *-ĭ-* to the preceding labial glide, *ŋ^h* (§ 7.15.1). The same takes place in the—**12. abl./dat.pl.** form *vaŋ^hhibiūō*, which normally has an ending *-ibiūō*; cf. Skt. *devíbhyas*.—**13. The inst.pl.** is *devíbhīḥ* in Skt. **14. The loc.pl.** has an ending *-išu*, which, with the usual postposition *ā*, becomes *-išuua* (§ 16.8); cf. Skt. *devīṣu*.

§ 19.4 *ū*-stems

Just as with the *ī*-stems, it is presumed that *ū*-stems served to make derived feminines, using the suffix **-h₂*, to *u*-stems. In Avestan, only three witnesses to this formation are found. These forms are distinguished from *u*-stems through their inflection, insofar as they are clearly hysterodynamic forms. Each one of these stems has corresponding forms preserved in Sanskrit: *tanū-* ‘body’ (Skt. *tanú-*), *ayrū-* ‘unmarried, virgin’ (Skt. *agrú-* < PIE **ŋ-g^hrh₂-úh₂-* ‘not-pregnant’) and *hizū-* (along with *hizuuā-*) ‘tongue’ (Skt. *juhú-* and *jihvā-*). It is likely that these stems were already seen as simple stems in *-u* with hysterodynamic inflection in YAv. times.

Singular: **1. The nom.sg.** *tanuš* has a short vowel *-u-*, in contrast to Skt. *tanúh*, possibly due to the influence of *u*-stems.—**2. The acc.sg.** YAv. *tanūm* can go back to **tanuṣam* from **tanuHŋ*, which seems to be confirmed in OAv. *tanuuēam*, cf. Skt. *tanuṣām*.—**3. The gen.sg.** *tanuuō*, *hizuuō* has an ending **-uH-as*, proper to the hysterodynamic type.—**4. The abl.sg.** YAv. *tanuuat* has an ending remade by analogy after the thematic inflection (§ 19.1.6).—**5. The dat.sg.** *tanuiē* shows the development of the sequence *-uṣai* into *-uiē* (§ 10.2.3).—**6. The inst.sg.** *tanuuā* is the equivalent of Skt. *tanuṣā*, but Av. *hizuuā* could equally continue an original form in **-uH-aH* or an inst.sg. **hizūā* from an *ā*-stem.—**7. The loc.sg.** *tanuui* represents **tan-uH-i*.

Plural: **8. The nom./acc.pl.** *ayruuō* goes back to an Ilr. ending **-uH-as*. OAv. *°tanuuō* shows a trisyllabic scansion: */ta-nu-ṣah/*.—**9. The gen.pl.** has taken the ending *-inqm*, found for the expected **-uH-nām*, from the *u*-stems; cf. Skt. *tanúnām*.—**10. The abl./dat.pl.** similarly has an ending with *-u*: *tanubiūō*; cf. Skt. *tanúbhyas*.—**11. The inst.pl.** is attested only in OAv. *hizubiš* (Skt. *juhúbhīḥ*), which implies, at least for OAv., that this whole class is remodeled after *u*-stems.—This conclusion finds further confirmation in the OAv. **12. loc.pl.** **tanušū-cā*, YAv. *tanušu*.

§ 19.5 *i-* and *u-*stems

The paradigms of *i-* and *u-*stems exhibit such similarity that the two inflectional types may be presented conjointly. The endings are the same as the endings

TABLE 10 *The inflection of i- and u-stems*

	Singular		Dual		Plural				
nom.	ašiš	xratuš	paiti	mañiiū	əɾəzu	ašaiiō	xratauuō		
voc.	°paitē	mañiiō				neut. aši	vaŋʰhi	gairiš	xratūš
acc.	ašim	xratūm						θrī	vohū
nom.acc.neut.	būiri°	vohu	ašiuuā̃	mañiuuā̃	gairinam	vohunam			
gen.	ašōiš	xratəuš					ašibiiā	ahubiiā	gairibiiō
abl.	garōit	xrataot							
dat.	axtōiōi	vaŋhauuē							
inst.	aši	xratū							
loc.	gara	vaŋhāu	aŋhuuō		vaŋhušu				

of the consonant stems. These two inflectional types include a considerable number of feminine and masculine nouns, as well as adjectives.

Some words belonging to the *i*-stems are Av. f. *aši-* ‘reward’, m. *axti-* ‘pain’, adj. *būiri-* ‘abundant’, YAv. m. *gairi-* ‘mountain’, m. *paiti-* ‘lord’. Some words belonging to the *u*-stems are Av. m. *aŋhu-* ‘life’, m. *pəɾətu-* ‘bridge’, m./f. *gauu-* ‘bull, cow’; adj. *aidiiu-* ‘harmless’, m. *xratu-* ‘intelligence’, m. *gātu-* ‘road, way’, f. *daxiiu-* (YAv. *daŋhu-*) ‘country’, m. *mañiiu-* ‘spirit’, adj. *vohu-* ‘good’. In addition, some very interesting neuters are present here: *āiiu-* ‘life’, *dāuru-* ‘wood’, *zānu-* ‘knee’. As for *i*-stems:

Singular: 1. The nom.sg. shows ZG of the suffix and of the ending in the regular type, while for *haxa* ‘companion’ and *kauua* ‘Kavi’, a hysterodynamic nom.sg. with LG of the suffix and a zero ending must be reconstructed: **sakhāi* and **kaūāi*. Comparison with the nom.sg. *sákhā* of Skt. shows that the loss of the final **-i* already took place in IIr.—2. *The acc.sg.* has **-i-m* (which always becomes *-im*), except in hysterodynamic stems, where the PIE ending **-oi-m* became IIr. **-āiam* (by BRUGMANN, § 7.4.6), which is attested in OAv. *huš.haxāim* (Skt. *sákhāyam*). YAv. *kauuaēm* can be the result of a shortening of **kaūāiam*, i.e., **-āiam* > **-aiam*. On the acc. *raēm*, Skt. *rayim*, cf. 10.1.3.—3. *The nom./acc.neut.* has a zero ending: *būiri-cā* (Skt. *bhūri-*)—4. *The gen.sg.* of IIr. PD type, **-ai-š*, has sometimes been provided, in YAv., with an analogical *i* on the stem: *janiioiš* to **jani-*.—5. *The abl.sg.* (cf. § 19.1.6) in *-ōit* is formed off the IIr. ending **-aiš*, the *-š* of which has been substituted by the *-t* of the abl.—6. *The dat.sg.* exhibits ablaut variants, following two stem types. One type comes from **-ai-ai*, and is found as *-ōiōi* in OAv. *axtōiōi* (to **axtəiəi*), and in YAv. as *-ēe*, with contraction of the final diphthong and loss of the intervocalic *-i-*: *frauuāšēe* ‘for Fravaši’. The original sequence is more clearly reflected before an enclitic: *nipā-taiiāēca* ‘to protect’. The other type of dat.sg. comes from **-i-ai*: *paiθe* (to *pai-*)

or *haśé* (to *haxai-*), with absorption of the **ǵ* by the preceding fricative.—7. The **inst.sg.**, in general, comes out of **-i-H*; the HD ending, **-i-aH*, is found only in *haśá* from **hax-ǵ-ā*.—8. The **loc.sg.** has a zero ending LG of the suffix; its **-ā* corresponds to the Skt. forms in *-ā*, and again attests to the loss of **ǵ* in the PIE sequence **-ēǵ#/-ōǵ#*.

Dual: 9. The **nom./acc./voc.du** in *-i* (*aēθrapaiti*) goes back to Ilr. **-ī*, though *haxaiia* shows FG in the suffix, which could be based on a LG; cf. Skt. *sákhāyā*.—10. The **nom./acc./voc.neut.du** likewise shows **-ī*: *uši* ‘two ears’, *aši* ‘two eyes’.—11. The **gen.du** shows the ending **-ās* in OAv. *haxtiā*.—12. The **abl./dat./inst.du** shows the usual **b^hiā*: *ušibiia* and *ašibiia*.

Plural: 13. The **nom./voc.pl.** in *-aiiō* has FG of the suffix and the proper ending for the case, inherited from PIE.—14. The **acc.pl.**, coming from PIE **-in-s*, preserves a trace of nasalization of the **i* in the ending *-iš*.—15. The **nom./acc./voc.neut.pl.** has an ending *-i* and comes from PIE **-i-h₂*.—16. The **gen.pl.** has taken *-nqm* as its ending from the *n-stems*, just as was done in Skt., but without lengthening the stem vowel (or rather, shortening it, following § 19.1.18?): YAv. *gairinqm* ‘from the mountains’ versus Skt. *-inām*. However, there are some forms that reflect the expected PIE ending **-i-om*: Av. *kaouiqm* from **kaui-ām*, *haśqm* from **saxiām* (cf. Lat. *marium*, Gr. *πολίων*). In Av., the long vowel proper to the *a-stems* has been introduced.—17. The **abl./dat.pl.** ends in the familiar *-biū*.

As for the *u-stems*: Avestan has regularized the paradigms in favor of the proterodynamic type (cf. § 17), though some traces of the old distribution of HD and PD stems, which will be indicated immediately below, still remain. On the neuters, cf. § 19.5.39 ff.

Singular: 18. The **nom.sg.** has the ending **-s*: *xratuš*, *pərətuš*; cf. Skt. *krátuḥ*. The **nom.sg.** *°bāzāuš* (in compounds) shows a **nom.** with lengthened grade (HD) < PIE **ēu-š*, in contrast to the simplex *bāzuš*. The **nom.sg.** of *gauu-* is *gāuš* (Skt. *gāuḥ*).—19. The **voc.sg.** has an ending *-uuō* < Ilr. **-au*: *ərəzuuō* ‘straight’, but *°mañiiō* preserves, in all probability, the intermediate stage *-ō*, in virtue of the preceding *ii* (§ 10.3.4).—20. The **acc.sg.** lengthens the **u* before the *-m*: *ahūm*, *dañiiūm* (cf. Skt. *dásyūm*). Forms with FG and LG of the suffix also exist: *dañhaom* to **dañiaum*, *nasāum* < **nasāum*. In YAv. texts, *dañiiūm* and *dañhaom* are used without any apparent semantic distinction.—21. The **nom./acc.neut.** has a zero ending: *vohū* (OAv. *vohu-cā*); cf. Skt. *vásu*—22. The **gen.sg.** in Ilr., **-au-š* (§ 10.4), takes the form *-əuš* in OAv.: *dañiiəuš*; meanwhile, in YAv., it takes the form *-aoš*: *rašnaoš*. In some cases, it appears that YAv. forms have been introduced into OAv.: *ərəzaoš*, *paraoš*, *mərəθiiaoš*. Opposite these PD endings, some HD forms in *-uuō* (< **-u-as*) are found: YAv. *ərəzuuō*

‘finger’, *xraθβō*, *pasuuō*, *raθβō* (§ 11.14.4). Forms ending in *-āuš* found in YAv. must be considered Gathicisms: *aṅhāuš*. HD stems have gradually taken on PD inflection, cf. Skt. *krátōḥ* and *krátvas*. In Skt. the PD type has also been extended.—23. The **abl.sg.** differs from the gen.sg. only in YAv. (cf. § 19.1.6): YAv. *xrataot*, *da(i)jhaot*—24. The **dat.sg.** has an ending *-auuē* (**-au-ai*): YAv. *da(i)jhaue*; remnants of HD forms, meanwhile, show an ending *-uuē* (**-u-ai*): YAv. *xraθβε*, *pəṛəθβε*. Some sound changes have partially disfigured this ending (§ 11.1.4): OAv. *ahuiiē* (modernization of the YAv.) and YAv. *aṅ^hhe* < **ahui*; cf. Skt. *vásave* and *krátve*.—25. The **inst.sg.** has an ending *-ū* < PIE **-uh₁*; *ahū*, *xratū*, *vohū* (*vohu-cā*). The HD forms have an ending *-uuā* (§ 11.14.4) < Ilr. **-uaH*: *xraθbā*; cf. Skt. *krátvā*, *mádhvā* (and *mádhunā*).—26. The **loc.sg.** has a zero ending and shows ablaut in the stem vowel (LG and FG): **-āu* and *-ō*, *-uuō* (both from Ilr. **-au*; § 10.3.4): Av. *vaṅhāu*, *xratā* (read *xratāu*; cf. § 7.5.3), YAv. *daijḥō* (and *daijḥuuō*), *gātuuō*; cf. Skt. *vásau*, *krátau*. In addition, forms with the postposition *ā* (§ 16.8) are found: YAv. *daijḥauua*, *aṅhauua* (< **-āu-a*).

Dual: 27. The **nom./acc./voc.du.** of animates has an ending *-ū* < Ilr. **-uH*: YAv. *daijḥu*; cf. Skt. *mádhū*, *bāhū*. In YAv., the isolated HD ending *-auua* is found: *bāzauua* (Skt. *bāhāvā*), **zanauua*.—28. The **nom./acc./voc.neut.du.** terminates in *-uuī*: *vaṅ^hi*; cf. Skt. *urvī* (*jánunī*). An ending *-u*, as in the masc., is not uncommon: *pouru-ca*, *vohu-ca*.—29. The **gen.du.** comes from **-uūāh*: OAv. *ahuuā*, YAv. *pasuuā*.—30. The **abl./dat./inst.du.** comes from **-ubiā*: *ahubiā*. The YAv. form *bāzuḥe* exhibits fricativization of the *-b-* and the development of final **-iā* to *-e* (§ 7.10.3).—31. The **loc.du.** is attested in OAv. *aṅhuuō* (*ahu-* ‘life’) < **ah₁-au*.

Plural: 32. The **nom./voc.pl.** continues PIE **-e₁-es* in the ending *-auuō*, *-auuas-ca*, while the YAv. forms *dajḥāuuō* (OP *dahayāva*) and *nasāuuō* seem to reflect **ou₁-es*.—33. The **acc.pl.** in *-ūš* < **-un-s* reflects nasalization on the vowel: Av. *vaṅhūš*, *nasūš*. The corresponding HD in **-u₁-s* appears in YAv. *pasuuō* (Skt. *paśvāḥ*) and in *pəṛəθβō* ‘crossing, gate, bridge’ (from **pṛtú-*), versus the acc.pl. of the PD type in OAv. *xratūš*, *pəṛətūš*. Some forms seem to have adopted the form of the nom.pl.: *pəṣāuuō* ‘bridges’ (from **pṛtú-*), *dajḥāuuō*.—34. The **nom./acc./voc.neut.pl.**, seen in OAv. *vohū*, comes from Ilr. **uas₁-H*.—35. The **gen.pl.**, as in *daḥiunqm*, *vohunqm*, could have retained the *-u-*, in contrast to the ending *-ūnām* of Skt. and OP. The HD form **-u-ām* is attested in YAv. *pasu-uqm*, *vaṅhuuqm*.—36. The **abl./dat.pl.** has restored the **-b-* (e.g., *dajḥubiō*), with the exception of *hinūibiō*.—In contrast, the 37. **inst.pl.** in **u-b^hiš* shows systematic lenition of the **-b-* (*auuaṅhūš* < **a-vaṅhu-βiš*, *yātuš* < **yātuβiš*, both in Y 12.4) or employs the form of the dat./abl.pl. (*bāzubüō*). A YAv. form in *-ubiš* is unknown.—38. The **loc.pl.** has **-u-šu*, which, with the postposition *ā* ‘in’, gives YAv. *pasuš.huua* < **pasušuā* ‘among the sheep’.

A few neuter nouns, whose inflection retains interesting remnants of ablaut, must be mentioned as well: *āiiu-* ‘life’, *dāuru-* ‘wood’, *zānu-* ‘knee’. **39. The nom.sg.** *āiiu*, *dāuru*, ^o*zānu* shows LG by BRUGMANN (cf. § 7.4.6; cf. Skt. *dāru*, *jānu*, Gr. *δόρυ*, *γόνυ*). YAv. *žnūm* is a secondary form, but it illustrates the ZG of the stem that is also used in compounds.—**40. The gen.sg.** is seen in OAv. *yaoš*, YAv. *draoš* (Skt. *dróh* < **dreu-s* versus Hom. Gr. *δουρός* < **deru-os*).—**41. The dat.sg.** is OAv. *yauuōi*, *yauuē*.—**42. The inst.sg.** is *yauuā*.—**43. The abl.pl.** is YAv. *žnubiias-ciṭ* (cf. *žn-* in § 11.25.4).

§ 20 The Adjective

Just as in Indo-European, adjectival inflection is not in any way distinct from nominal inflection in Avestan. The Indo-European situation was preserved in Indo-Iranian down into Avestan, with the exception of some innovations in certain adjectives that have been pronominalized (§ 20.2). The function of the adjective is expressed through its position and agreement in the sentence, as well as by the semantics of its formative suffix.

Regarding gender, it may be noted that the neuter differs from the masculine only in the nom. and acc. cases. The athematic classes usually form the feminine by way of the motion suffix **-ī* < PIE **-ih₂*, while the thematic adjectives are served by *-ā*: *pərəθu-* m., *pərəθβī-* ‘broad’, versus *paθana-* neut., *paθanā-* f. ‘distant, vast’. Thematic adjectives with the motion suffix *-ī* are occasionally found. In those cases, an individualizing value (with substantivization) is discernable: YAv. *apuθra-* m., *apuθrā-* ‘without sons’, versus *hupuθri-* ‘she who has good sons’.

§ 20.1 Degrees of Comparison (Gradation)

Degrees of comparison in the adjective were expressed in the parent language through special suffixes. In the same fashion, Avestan forms comparatives and superlatives with inherited suffixes. Two types of suffixes used to express degree of comparison on adjectives are found.

1. The more archaic type, used for adjectival comparison *stricto sensu*, is formed using a pair of suffixes coming from Ilr. **-ias-*, for the comparative, and Ilr. **-išta-*, for the superlative. These are primary suffixes: both are added directly to the root with FG, i.e., the stem is stripped of its suffix: the comparative of **vah-u-* ‘good’ is OAv. *vah-iih-* (cf. Gr. *ἡδύς*; *ἡδ-ίων ἡδ-ιστος*). This kind of adjectival comparison ceased to be productive in the Avestan period.

Examples: *uyra-* ‘strong’ gives *aojiih-* *aojišta-*; *kasu-* ‘small’ gives *kasiih-* *kasišta-*; *mazaṇt-* ‘large’ gives *maziiah-* *mazišta-*; *vaṇhu-* ‘good’ gives OAv. *vahiih-* (YAv. *vaṇjah-*) *vahišta-*; *srīra-* ‘beautiful’ gives *sraiih-* *sraēšta-*.

2. The second type is formed using a pair of secondary suffixes coming from Ilr. *-*tara-* and *-*tama-* (cf. Gr. πρέσβυς: πρεσβύ-τερος πρεσβύ-τατος), the origin of which seems to lie in formations having oppositional or contrastive function. In effect, the PIE suffix *-*tero-* served to express the notion of a binary opposition, first with adverbs and pronouns: cf. Gr. πρότερον ‘before’, Skt. *úttara-* ‘above’, Skt. *katará-* and Gr. πότερος ‘which (of two)?’. Later, the use of this suffix was extended to other nominal classes as well. In the same fashion, the suffix *-*tama* was also first used with adverbs, cf. Skt. *ántama-* ‘that which is nearest’, Lat. *intimus*, Skt. *katamá-* ‘which (of several)?’.

This second type of of adjectival comparison is the only one that has continued to be productive beyond Proto-Avestan. The suffixes are appended to the stem (i.e., they are secondary), and are even found attached to compounds: *aš.aojastara-* ‘stronger’, from *aš.aojah-* ‘with much force’; *vərəθrajaštama-* ‘most victorious’ (from *vərəθra-jan-* ‘destroying the obstacle’).

§ 20.2 *Pronominalized Adjectives*

The semantic proximity of some adjectives to the pronouns induced these adjectives to partially adopt some endings from the pronouns. This phenomenon is not unknown in other Indo-European languages: cf. Lat. gen.sg. *ullius*, dat.sg. *ullī*. This formal reshaping must have taken place already in part during the Indo-Iranian period, judging from various forms of the m./n. plural of *a-*stems (cf. § 19.1), such as Ilr. *-*aib^hias* and *-*aīšu*, with correspondents in Sanskrit, Avestan, and Old Persian. Beyond these forms, this phenomenon is found to be much less extensive in Avestan than in Sanskrit.

The forms that we find are as follows: **dat.sg.m/n.** YAv. *añiiāhmāi* ‘for the other’ (Skt. *anyásmāi*); *vīspəmāi* ‘for all’, and YAv. ⁺*vīspāñī* (§§ 5.2.5, 7.9.2; Skt. *vīsvasmai*; the nominal form *vīspāi* is also found); the **nom.pl.m.** YAv. *añiie* (Skt. *anyé*), *vīspe* (Skt. *vīśve*), versus OAv. *vīspāñhō*; the **gen.pl.** YAv. *añiiaēšqm* (Skt. *anyéśām*), YAv. *vīspaēšqm* (Skt. *vīśveśām*), versus Av. *vīspanqm*. Some pronominalized forms of the numeral *aēuua-* ‘one’ are likewise evident: loc.sg.m. *aēuuahmi* (see Skt. *ékasmin*), gen.sg.f. *aēuuajhā* (see Skt. *ékasyās*).

TABLE 11 Numerals

Cardinals		Ordinals	Cardinals		Ordinals
aēuua-	‘1’	fratəma-; paoiriia-	duua.dasa	‘12’	duuadasa-
duua-	‘2’	daibitiia-; bitiia-	vīsaiti-	‘20’	vīsaštəma-
θri-, tišr-	‘3’	θritiia-	θrišašas, θrisat-	‘30’	
caθβar-, cataṅr-	‘4’	tūiriia-	caθβarəsat-	‘40’	
paṅca	‘5’	puχḁa-	paṅcāsat-	‘50’	
xšuuuāš	‘6’	xštuuu-	xšuuuāšti-	‘60’	
hapta	‘7’	haptaθa-	haptāiti-	‘70’	
ašta	‘8’	aštəma-	aštāiti-	‘80’	
nauua	‘9’	naoma-	nauuaiti-	‘90’	
dasa	‘10’	dasəma-	sata-	‘100’	satōtəma-

§ 21 Numerals

§ 21.1 Cardinal Numbers

The numbers ‘1’ through ‘4’ have a full nominal inflection in case and gender, but inflection for number depends on the numeral involved: ‘1’ inflects in the singular, ‘2’ in the dual, while ‘3’ and ‘4’ inflect in the plural. The numbers ‘5’ to ‘19’ are indeclinable, and all following numbers are inflected depending upon their respective stems.

‘1’ is *aēuua-* (OP *aiva-*, Gr. οἶφος ‘alone’), and differs in suffix from Skt. *éka-* (from **aiḱa-*; Mittani *aika*^o), though it is found in the Skt. adv. *evá(m)* ‘indeed’ < PIE **oi-ḡo* ‘just that’, on which the Av. form rests. The numeral *aēuua-* is declined as an *a*-stem, although some pronominal forms occur (§ 20.2). One form that calls for comment is the acc.sg. *ōiiūm*, which is the regular reflex of Ilr. **aiḡam* by way of **aiḡam* > **aiḡum* > **aiḡum*. In some texts, the simplified variants *ōim* and *ōim* can be found.

‘2’ is *duua-* (Skt. *d_uvā* Gr. δύο) and also OAv. *uba-*, YAv. *uua-* ‘the two, both’ (Skt. *ubhá*, OP *ubā*, OCS *oba*; with a nasal, Gr. ἄμφω, Lat. *ambō*). Both stems agree in their inflection with the dual of an *a*-stem (cf. § 19.1): nom.acc.m. *duua*, *uua*⁷ (OP *ubā*, Skt. *ubhá*); nom.acc.neut./f. OAv. *ubē*, YAv. *duiie*, *duuaēca*, *uiie*

7 This is the only Av. form with initial *uu-*, because **u-* always becomes *v-* (§ 11.1.2). The manuscripts often show *va*, *vā*, *auua*.

(Skt. *ubhé*; cf. § 10.2.3); inst.dat.abl.m. OAv. *ubōibiūā*, YAv. *duuaēibiūa* (Skt. *dvābhyām*), *uuaēibiūa* (Skt. *ubhābhyām*); gen.m. *duuaitiā*, *uuaitiā*; loc.m. OAv. *ubōiūō*, YAv. *+uuaiūō* (Skt. *ubhāyoh*).

'3' has a stem *θri-* for the masculine and neuter, but *tišr-* for the feminine, just as with Skt. *tri-* and *tisr-*. This division goes back to PIE, to judge from OIr. *téoir* < **tisres*. In the other IE languages, the feminine stem is completely lost. The forms attested in Avestan are: nom.m. *θrāiūō*, *θraiias-ca* (Skt. *trāyas*; note the *ā* of the Av. versus the short *a* of the Skt. Perhaps Av. has taken this *ā* from the number '4'). The acc.m. *θriš* (Skt. *trín*) derives from PIE **trins*. The YAv. nom.acc.neut. *θri* (cf. § 7.2.; Skt. *trí*) derives from PIE **tri-h₂*. The inst.m. is *θribiūō* (Skt. inst. *tribhīh*, dat. *tribhyás*). The gen.m. exhibits two forms, *θraiiqm* and *θriiqm*, though it is difficult to know which is the original, given that Skt. *trīnām* offers no help. The feminine possesses a nom. *θrāiūō* (originally masc.), the acc. *tišrō* (Skt. *tisrás*) and the gen. *tišraqm*.

'4' possesses two stems that depend upon gender. The masculine and neuter are formed from a stem *caθβar-/catur-*, while the feminine is built to a stem *catayr-*. The nom.masc. is *caθβārō*, with *ā* resulting from BRUGMANN (§ 7.4.6), just like Skt. *catvāras*; with an enclitic, a shortened vowel is found, thus *caθβaras-ca*, following § 7.3.1. The acc.m. *caturō* shows an ending introduced from the thematic nouns in *-a* (Skt. *catúras*). The same has happened with the nom.acc.neut. *catura*, but not with the gen. *caturqm*. The feminine of '4' also carried a formant **-sr-*, like that of '3', whence YAv. acc. *catayrō* from Iir. **čátasras* (Skt. *cátasras*). As was already mentioned above, these forms can go back to PIE, to judge from the OIr. continuant *cethéoir* < **k^uetesr-*.

The cardinal numbers '5' through '19' were originally indeclinable, but there are nevertheless forms of the gen. attested for '5', '9', and '10': *pañcanqm* (Skt. *pañcānām*), *nauuanqm* (Skt. *navānām*), *dasanqm*. The form *pañcā-ca* in *pañcāca visaiti-* '25' has secondary *ā* (cf. § 16.1.2) opposite the regular *nauuaca nauuaiti-* '99'. These forms correspond exactly to their Skt. equivalents. Note that the initial *x-* in *xšuuas* '6' results from the secondary prothesis of *x-* onto an initial cluster of *š* plus consonant (cf. § 11.16). Of the numbers from '11' to '19', only *duuadasa* '12' and *pañcadasa* '15' are attested as cardinal numbers; the rest appear only as ordinals.

The decads inflect as follows: the decads from '20' to '50' behave as *-ant-* stems, while those from '60' to '90' are abstracts in *-ti*. '20' corresponds to Skt. *vimśati-* (with secondary nasal), from **vi-čati-* < PIE **dui-dkmt-i* 'two decads'. For '30', we have the nom.m. *θrisqs*, which continues the PIE form **tri(h₂)-dkomt-* (Gr. *τριάκοντα*, OIr. *tricho*), the nom.acc.neut. *θrisatəm*, and the gen. *θrisatanqm*, which point to a secondary thematization of the oblique stem **θrisat-*, retained in *θrisaθβant-* '30 times'. Another athematic form occurs in

pañcāsaṭbīś-ca, the inst. of ‘50’, the long *ā* of which calls for comment. Both this form and Skt. *pañcā-śát* show lengthening of an **e* following the loss of a preconsonantal **d*, proceeding from PIE **penk^ue-dk̑nt-*. The long vowel of *haptāiti-* and *aštāiti-*, which the Skt. forms *saptatī-* and *aśītī-* lack, may be due to the form of ‘80’, if it was built off the simplex ‘8’ (Gr. ὀκτώ; PIE **h₃ektoh_x*), i.e., from Ilr. **áctaH-ti-*.

The numbers *sata-* ‘hundred’ and *hazaŋra-* ‘thousand’ inflect as *a*-stems, but *baēuuarə* ‘ten thousand’ inflects as a neuter *r/n*-stem. Av. *sata-* is equivalent to Skt. *śata-* and to forms in other IE languages that allow for the reconstruction of a PIE **k̑ntó-* from **dk̑nt-ó-* ‘(the) tenth (decad)’. It is notable that a form for ‘1000’ cannot be reconstructed for PIE, but Av. *hazaŋra-*, as well as Skt. *sahásra-*, do contain an Ilr. element **-ž^hasra-* < PIE **sm̑-ǵ^heslo-* (cf. Lat. *mille* < **smih₂-ǵ^heslih₂*), which can be compared with Gr. (Ionic) χεῖλοι, (Aeolic) χέλλιοι ‘thousand’ < **ǵ^heslijo-*.

§ 21.2 Ordinal Numbers

For ‘first’, *fratəma-*, the original sense of which was ‘the foremost’ (cf. Skt. *prathamá-*), and which was a superlative to *fra* ‘forth, in front’, is used. ‘First’ in the temporal sense was **pȓHúá-* in Ilr. (derived from PIE **pȓh₂ós* ‘before’); cf. Skt. *púrva-*, Av. *pauruua-* ‘previous’. The suffix **-ia-* was added to this stem already in (Proto)-Iranian: **pȓHúia-*, which results in Av. *paoiriia-* (cf. § 8.2).

‘Second’ was Ilr. **dui-tija-*, which gave OAv. */dbitiia-*, written *daibitiia-* (§ 11.13), and, with loss of *d-*, YAv. *bitiia-*; cf. Skt. *dvitīya-*. The same formation is encountered in *θritiia-* ‘third’, starting from a stem *θrita-* (cf. Gr. τρίτος; a different stem in Skt. *tȓtīya-*), which is also found in names. The Av. form *tūriia-* ‘fourth’ < Ilr. **ktur-(ē)ja-* < PIE **k^utur^o*, with ZG of the root, had already lost the **k-* in Ilr. times, judging from Skt. *tuȓya-*, but the *k-* is retained in Av. *āxtūirīm* ‘four times’ < **ā-kturījam*. Av. *puxda-* ‘fifth’ seems to be a product of an earlier **paxθa-* (Skt. *pakthá-*), also with ZG in contrast to *pañca* ‘5’, which would have taken the *-u-* from **tuȓja-* ‘fourth’ and from a supposed **xšūšta-* ‘sixth’, the actually attested form of which, *xštūua-*, lacks a definitive explanation.

The ordinals from ‘seventh’ to ‘tenth’ correspond exactly to their respective forms in Skt., and exhibit incipient generalization of the Ilr. suffix **-má-* < PIE **-mó-*, which would become very productive in the later Iranian languages: ‘7th’: Av. *haptaθa-* (Skt. *saptátha-*); ‘8th’: YAv. *aštəma-* (Skt. *aṣṭamá-*); ‘9th’: YAv. *naoma-* (Skt. *navamá-*); ‘10th’: Av. *dasəma-* (Skt. *daśamá-*). Meanwhile, ‘eleventh’ to ‘nineteenth’ are formed with the same simple thematic inflection of the cardinal numbers, thus *aēuuaŋdasa-* ‘11th’, *duuadasa-* ‘12th’, *θridasa-* ‘13th’, *caθrudasa-* ‘14th’, etc. The form *vīsastəma-* ‘twentieth’ apparently substitutes an earlier **vīsastəma-* (from *vīsata-tama*, cf. § 11.20.2), which already

shows the suffix **-tama-*, used also in *satōtama-* ‘hundredth’ and *hazanrōtama-* ‘thousandth’.

The form of the acc.sg.neut. of ordinals can serve as a temporal adverb, thus *paoirīm* ‘for the first time’ or ‘firstly’, *bitīm* ‘for the second time’, though the dat.sg.neut. is also used for this expression, thus *paoiriūāi*, *bitiūāi*.

§ 21.3 *Multiplicatives*

For ‘once’, *hakarət*, a form identical to Skt. *sakṛt*, is used. In both forms, the prefix *sa-* reflects **sm-* (ZG of PIE **sem-* ‘one, united’, cf. Gr. ἄ-παξ ‘once’, εἷς ‘one’). Other multiplicatives are built by adding a suffix *-s* after the stem in the ZG: *biš* ‘twice’, *θriš* ‘thrice’, *caθruš* ‘four times’, and *xšuuuš* ‘six times’. For numbers greater than ‘six’, adjectives with a suffix **-uant-* are formed, thus *vīsaitiuuant-* ‘twenty times’, *θrišaθβaṇt-* ‘thirty times’, etc. It seems that this same suffix was likewise used for the forms found in late texts, *bižuuat* ‘twice’ and *θrižuuat* ‘thrice’, from *biš* and *θriš*.

§ 21.4 *Fractions*

‘Half’ is expressed by *arəda-* (Skt. *ardhá-*) or *naēma-* (Skt. *néma-*). For the formation of other fractions, a suffix **-sua-*, which is attested in Avestan and Old Persian, comes into play. This suffix developed from a metanalysis **^os-ua-*, beginning from ‘one third’ and ‘one fourth’: *θrišuuu-* neut. ‘one third’ (OP **čišuva-*) < **tríš-ua-*, cf. Gr. θρίων ‘fig leaf’, and neut. *θrižant-* ‘id.’ is also found; *caθrušuuu-* ‘one fourth’ (OP **čačušuva-*) < **catruš-ua-*; the form *paṇtaṇhuua-* ‘one fifth’ is unexpected in comparison to OP **pančauva-* < **panca-hua-*; we also find *haptaṇhuua-* ‘one seventh’ and *aštaṇhuua-* ‘one eighth’ (OP **aštauva-*).

§ 22 Pronouns

Already in the reconstructed proto-language, the pronominal inflection was characterized by a set of its own case endings, distinct from those belonging to the inflection of nouns and adjectives. Suppletion is likewise very common in the inflection of pronouns, i.e., distinct stems co-occur within one and the same paradigm. In Avestan, like in the rest of the Indo-European languages, the pronominal inflection has preserved some peculiar features, but analogical interchange and mutual influence between the nominal and pronominal inflections are observable already from the oldest period (cf. §§19.1.19, 20.2).

In Table 12, the (Proto-Ir.) endings from which one must proceed in order to explain the majority of the Avestan forms are given. Where it is not possible to

TABLE 12 *The pronominal endings in their Proto-Iranian form*

	Singular		Dual		Plural		
	masc./neut.	fem.	masc./neut.	fem.	masc./neut.	fem.	fem.
nom.	*-∅, *-h, *-š	*-∅, *-H, *-ai̇	*-H	*-ai̇	*-ai̇	*-H	*-āh
acc.	-(a)m	*-ām			*-anh		
gen.	*-hja	*-hjȧh	*-jȧh		*-ai̇šām		*-āhām
abl.	*-hmāt	*-hjȧt					
dat.	*-hmāi̇	*-hjȧi̇			*-ai̇bjȧh		*-ābjȧh
inst.	*-nā, *-ā	*-jȧ	*-ibjȧ		*-ai̇š, *-ai̇bi̇š		*-ābi̇š
loc.	*-hmi	*-hjȧ			-ai̇šū		*-āhu

abstract a concrete morpheme from the evidence, the box in the table has been left empty. The personal pronouns must be considered separately.

§ 22.1 *Personal Pronouns*

Personal pronouns are characterized by suppletion and lack of grammatical gender from the Indo-European period forward. In Table 13, the attested forms of both stressed and enclitic personal pronouns are given.

N.B. for *accented pronouns*:

1. The **1st.sg.** has a nom.sg. *azəm*, which agrees with Skt. *ahām* and OP *adam*. A hapax *as-cīt*, of doubtful interpretation, is also known. The rest of the forms are built from a stem **ma-*: YAv. acc. *məm* (OP *mām*, Skt. *mām*); the abl. **-d* (Skt. *mād*); the gen. **-na* (OP *manā*, OCS *mene*); the dat. **-b^hja* (cf. Skt. *máhyam*); YAv. *māuuōiia* < **maβiia*, cf. § 7.4.2, 9.2.4, 11.1.4. The form *maibiiō*, with *-ō* instead of *-ā*, is due to the influence of pronominal dat.pl. forms in *-biiō*, such as *aēibiūō* and *yaēibiūō* (cf. 22.2, f.)

2. The **2nd.sg.** uses the stems **ta-* and **tva-*, but the nom. shows old **tuH* > Av. *tū* alongside **tuH-am* (OP *tuvam*, Skt. *tvām*), an innovation based on the latter part of *azəm* 'I'. Cf. further *vaēm* 'we' < **vaj-am* (cf. Goth. *weis*) and *yūžəm* 'you (pl.)' (cf. Goth. *jūs*).

3. The **1st.du.** *vā* (Skt. *vām*) is of the same stem as the nom.pl. *vaēm*. In the **1st.pl.**, a suppletive stem **asma-* is used (§ 22.1.5). A curious feature of this inflection is that, except in the nom. and gen., the cases of the sg. and the pl. are built with the same endings, availing themselves of suppletion in the stem to convey the difference in number: cf. dat. *maibiiā*: *ahmaibiiā* (cf. Skt. *máhyam*: *asmábhyaṃ*), etc. For the **2nd.du.**, we have *yauuākəm* (cf. Skt. *yuváku*). Cf. further the Skt. forms nom. *yuvām*, acc. *yuvām*, gen. *yuváḥ*.

TABLE 13 *Personal pronouns*

	1st Accented	Enclitic	2nd Accented	Enclitic
nom.sg.	<i>azēm, azəm ascīt</i>		<i>tuuēm, tūm; tū</i>	
acc.sg.	<i>mām</i>	<i>mā</i>	<i>θβām</i>	<i>θβā</i>
gen.sg.	<i>mā.nā, mana</i>	<i>mōi, mē</i>	<i>tauuā, tauua</i>	<i>tōi, tē</i>
abl.sg.	<i>maṭ?</i>		<i>θβaṭ</i>	
dat.sg.	<i>maibiiā, maibiiō, māuuōiia</i>	<i>mōi, mē</i>	<i>taibiiā, taibiiō</i>	<i>tōi, tē</i>
inst.sg.			<i>θβā</i>	
nom.du.	<i>vā</i>			
acc.du.	<i>əāuuā?</i>			
gen.du.		<i>nā</i>	<i>yauuākəm</i>	
nom.pl.	<i>vaēm</i>		<i>yūžəm, yūžəm; yūš</i>	
acc.pl.	<i>əhmā, ahma</i>	<i>nā, nō</i>		<i>vā, vō</i>
gen.pl.	<i>ahmākəm</i>	<i>nā, nō</i>	<i>xšmākəm; yūšmākəm</i>	<i>vā, vō</i>
abl.pl.	<i>ahmaṭ</i>		<i>xšmaṭ; yūšmaṭ</i>	
dat.pl.	<i>ahmaibiiā</i>	<i>nā, nō</i>	<i>xšmaibiiā, xšmāuuōiia</i>	<i>vā, vō</i>
inst.pl.	<i>əhmā</i>		<i>xšmā</i>	

4. The **2nd.pl.** OAv. *yūžəm*, YAv. *yūžəm* (cf. Skt. *yūyám*) has an unexpected *ž* (from external sandhi of **yūš-am?* § 11.25.1). The oblique forms make use of the stems *xšma-* and *yūšma-*. An Ilr. stem **ušma-* (cf. Aeolic Gr. acc. *ὑμε*) underlies both of these stems. The variant *xšma-* is explicable through loss of the *u-* > **šma-* and subsequent prothesis of *x-* (cf. § 11.16). The variant *yūšma-* is due to influence from the nom. *yūš*. Cf. dat. OAv. *xšmaibiiā* and *yūšmaibiiā* versus Skt. *yušmābhyam*.

N.B. for *enclitics* (unaccented pronouns):

5. The **1st. Singular:** in the acc., *mā* is identical to Skt. *mā*. The oblique enclitic (gen.dat.) is OAv. *mōi*, YAv. *mē* (OP *-maiṣ*, Skt. *me*).—**Plural:** the stem *na-* is used in the dual and plural, and it is also contained in the stem **asma-* < PIE **ṛnsme-*. In OAv., distinct forms exist for the acc.pl., *nā* (Lat. *nōs*), and the oblique cases, *nā* (cf. Lat. *nōs-trum*), in contrast to the single case form of YAv., *nō* (and of Skt. *nas*).

The **2nd. Singular:** in the acc., Av. *θβā* is identical to Skt. *tvā*. The oblique enclitic (gen.dat.) is OAv. *tōi*, YAv. *tē* (OP *-taiṣ*, Skt. *te*).—**Plural:** In the plural, the stem *va-* is used. In OAv., distinct forms exist for the acc.pl., *vā* (Lat. *uōs*),

and the oblique cases, $v\bar{v}$ (cf. Lat. *uōs-trum*), in contrast to the single case form of YAv., $v\bar{o}$ (and of Skt. *vas*).

6. For the enclitics of the 3rd person, some forms of the old demonstrative pronoun *a-/i-*, which were substituted by the stem *ima* (§ 22.2), are used: acc.sg.m.f. $\bar{i}m$ (Skt. *īm*, Cypriot Gr. $\dot{\iota}\bar{v}$?); acc.sg.neut. OAv. $\bar{i}t$, YAv. $\bar{i}t$ (cf. the Skt. particle $\bar{i}t$); acc.pl.m.f. $\bar{i}š$; acc.pl.neut. \bar{i} . Some YAv. forms with initial *d-* must have originated in sandhi with a preceding dental (e.g., **yad im*): acc.sg.m.f. $\bar{d}im$ (OP *-dīm*); acc.sg.neut. $\bar{d}it$; acc.pl.m.f. $\bar{d}iš$ (OP *-dīš*); acc.pl.neut. $\bar{d}i$.

Other forms took an **s-* by analogy to the paradigm of *sa-*, *ta-*. Accented forms are nom.sg.f. OAv. $\bar{h}i$ and nom.du.neut. OAv. $\bar{h}i$. Enclitic forms are acc.sg.f. Av. $\bar{h}im$ (OP *-šim*, Skt. *śim*), acc.pl.m.f. Av. $\bar{h}iš$ (cf. OP *-šīš*) and the gen.dat.sg. OAv. $\bar{h}ōi$, YAv. $\bar{h}ē$, $\bar{š}ē$ (cf. OP *-šaiy*). At times, variation between *h-* and *š-* occurs, which is explicable as the result of RUKI in external sandhi: *pairi šē* but *aṭca hē*.⁸

7. The accented reflexive pronoun has adopted the stem **sya-* from the possessive pron. In Av., only the following forms are attested: gen. *x^vahe*; dat.sg. YAv. *huuāuuōiia* (from **h_uβ_ia*, cf. *māuuōiia* above § 22.1.1) and YAv. *x^vāi*.

§ 22.2 Demonstrative Pronouns

1. *a-/i-/ima-* ‘this’. This pronoun, of anaphoric origin, combines stems deriving from PIE **h₁e_i-*/**h₁i-* and **h₁e-* (cf. Lat. *is*, *ea*, *id*) in a suppletive pattern. The **nom.sg.m.** comes from **ajam* > Skt. *ayám* (cf. OP *iyam*)—The **acc.sg.m.** arises from an Ilr. innovation in which the old form **im* (Lat. *im*) was “accusativized” by adding the ending **-am*—The **nom.acc.sg.neut.** *imaṭ* (cf. OP *ima*) replaces the **-m* of the new form with the *-ṭ* of the neuter pronouns. Starting from the two preceding case forms, it became possible to extract a stem *ima-*, from which the rest of the direct cases of the masc., neut., and fem. with thematic endings emerged.

The oblique cases are built off the stem *a-*: the **gen.sg.m.** comes from **asja* > Skt. *asya*;⁹ the **gen.du.m.** *a-iiā* (cf. Skt. *ayóh*; § 19.1.12); the **inst.pl.m.** $\bar{a}iš$; the **abl.dat.** and **loc.sg.m.** make use of a formant **-sm-*. The **inst.sg.m.** from **anā* (OP *anā*; cf. Skt. *enā*) is built with the stem *ana-* (cf. below § 22.2.4).—The feminine forms of the **gen.abl.sg.** come from **asiās* > Skt. *asyās*; (the form *a^jhāt*

8 In YAv., however, this old distribution is often disrupted. Old Persian, which maintains the use of the 3rd person enclitic, offers only variants with *-š-*.

9 *ahe* is used attributively and anaphorically, while *a^jhe* is only found in anaphoric use. *ahe* probably represents the original development (cf. the gen.sg. of the *a-*stems), whereas *a^jhe* introduced *-j^h-* from the fem. pronouns.

TABLE 14 The demonstrative pronoun a-/i-/ima-

1. a-/i-/ima- 'this'	Masculine, Neuter	Feminine
nom. sg.	<i>aiiām, aēm</i>	<i>īm</i>
acc.	<i>iməm</i>	<i>iməm</i>
nom.acc.neut.	<i>imaṭ</i>	
gen.	<i>ahiiā, axiiāca, ahe, aṅhe</i>	<i>aṅhā, aṅhāasca</i>
abl.	<i>ahmāṭ</i>	<i>aṅhā; aṅhāṭ</i>
dat.	<i>ahmāi</i>	<i>axiiāi, aṅhāi</i>
inst.	<i>anā, ana</i>	<i>ōiā, aiia</i>
loc.	<i>ahmī, ahmi, ahmiia</i>	<i>aṅhe</i>
nom.m. du.	<i>ima</i>	
gen.	<i>aiiā; āscā</i>	
dat.	<i>ābiia</i>	<i>ābiū</i>
nom.m. pl.	<i>ime</i>	<i>imā</i>
acc.m.	<i>ima</i>	<i>imā</i>
nom.acc.neut.	<i>imā, ima, imā</i>	
gen.	<i>aēšəm</i>	<i>āṅhəm</i>
dat.	<i>aēibiiō</i>	<i>ābiūscā, ābiiō, aiḃiiasca</i>
inst.	<i>āiš; aēibiš</i>	<i>ābiš</i>
loc.	<i>aēšu, aēšuuā</i>	<i>āhū, āhuuā</i>

shows the late substitution of *-s by *-t); the **dat.sg.** from **asiāi* > Skt. *asyái*; the **loc.sg.** is from **asiā* (cf. Skt. *asyām*). The **inst.sg.f.** from **aiā* (Skt. *ayā*) is an exception in that it does not contain an -s-. There is also a form f. *āiia*, which owes its long vowel to the preceding **i* in *paiti āiia zēmā* 'on this earth'.

In the plural, the m./n. oblique cases are built off a stem **ai-*, which recalls the nom.m. **ai-am*, just like the stems *aēta-* and *aēuuā-* (see below). The oblique cases of the fem.pl. are formed starting from an unexpected stem *ā-*, which probably derives from the inflection of the pronouns *ta-*, *ka-*, and *ya-*. Note the ending **-sām* of the gen.pl., versus PIE **-som* as reflected in Lat. *eō-rum, eā-rum*, and OCS *těxъ* 'of these'.

2. *ta-* 'that', 3. *aēta-* 'that there'. The first of these pronouns continues the old demonstrative. Its paradigm conforms to the usual pattern of suppletion. The nom.sg. was suppletive even in PIE, m. **só*, neut. **tód*, f. **séh₂* > Av. *hā, taṭ, hā* (Skt. *sá, tát, sá*; Goth. *sa, þata, so*; Gr. *ó, τό, ἡ*). The nom.sg.m. attests to a sigmatic variant, OAv. *hā, YAv. hō, has-ciṭ*. The stem takes thematic inflection in the direct cases, as well as in the forms of the inst. Apart from the inst., there are

TABLE 15 *The demonstrative pronouns ta-, aēta-*

2. <i>ta-</i> ‘that’		
3. <i>aēta-</i> ‘that there’	Masculine, Neuter	Feminine
nom. sg.	<i>hā; h̄ā, hō, hasciṭ; aēša; aēšō</i>	<i>hā; aēšā</i>
acc.	<i>tām, təm</i>	<i>taṃ; aētaṃ</i>
nom.acc.neut.	<i>taṭ; aētaṭ</i>	
gen.	<i>aētahe</i>	<i>aētaṛhā; aētaiiā</i>
abl.	<i>aētahmāṭ</i>	
dat.	<i>aētahmāi</i>	
inst.	<i>tā; aēta</i>	<i>aētaiia</i>
loc.	<i>aētahmi, aētahmiia</i>	
nom.acc. du.	<i>tā, tāca</i>	
nom.acc.neut.	<i>tē; aēte</i>	
gen.	<i>aētaiiā</i>	
nom. pl.	<i>tōi, taēcīṭ, tē; aēte, aētaēca</i>	<i>tā, tāsciṭ; aētāsā.tē</i>
acc.	<i>tāng, ta tō; aētō, aēta</i>	<i>tā, tāscā; aētā</i>
nom.acc.neut.	<i>tā; aēta, aētāciṭ</i>	
gen.	<i>aētaēšam</i>	<i>aētaṛham</i>
dat.	<i>aētaēibiiō</i>	<i>aētābiiō</i>
inst.	<i>tāiš</i>	
loc.	<i>aētaēšu, aētaēšuuā</i>	

no oblique forms attested to the stem *ta-*. Instead, the stem *aēta-* appears, which has a complete inflection apart from the suppletive nom.sg., which comes from m. **aiša* (Skt. *eṣā*), f. **aišā* (Skt. *eṣā*).

The inflection of these pronouns follows that already seen under § 22.2.1, 22.5.2, i.e., through the insertion of typically pronominal elements such as **-sm-* in the oblique cases of the masc., or **-ai-* and **-ā* in the oblique cases of the masc./fem.pl. There are some forms worthy of note: the gen.pl.fem. *aētaṛham* shows shortening of the **-ā-* (Skt. *etāsām*); the gen.sg.fem. *aētaṛhā* is equivalent to Skt. *etāsyas*, while *aētaiiā* and *aētaiiāsciṭ* owe their endings to the influence of feminines in *-ā* (§ 19.2.4).

The fact that no forms of *aēta-* are found attested in OAv. may be mere coincidence, but the total absence of oblique forms of *ta-* in YAv. (except in the inst.) is probably an innovation of YAv., in which *ta-* was replaced by *aēta-*.

4. *ana-* ‘this’ is a suppletive stem in Avestan that is found attested in other languages: OCS *onъ* ‘that there’, Lith. *anàs* ‘that’ < PIE **h₁ono-*, which has left

traces in Iir.: cf. the Skt. adv. *aná* ‘therefore’ (inst.sg.neut.), *anayā* (inst.sg.f.). Avestan attests to OAv. inst.sg.m. *anā* (OP *anā*; Skt. *aná*); inst.pl.m.neut. *anāiš*; gen.sg.m. ⁺*anahe*; abl.sg.m. *anahmāt*; and the inst.sg.m.neut. *ana*.

5. The stem of the demonstrative *auua-* ‘that there’ may be compared with the Skt. gen.du. *avóh* (OP *ava*, and also OCS *ovъ* ‘this’ < PIE **h₂e_uo-*). The Avestan paradigm possesses a nom.sg.m., OAv. *huuō* (**hau*; cf. § 10.3.4) and YAv. *hāu*, which is, in origin, a fem. form also attested as a nom.sg.fem. YAv. *hāu*, made from a supplementary stem comparable to the Skt. nom.sg.m.f. *asáu* ‘that there’ or OP *hauv*. The other case forms allow for derivation from the stem *auua-*, with its already familiar pronominal endings: nom.acc.sg.neut. *auuaŋ* (OP *ava*); acc.sg.m. *aom* (OP *avam*); gen.sg.m.neut. *auuaŋhe* and *auuaheca* (OP *avahayā*); inst.sg.m. OAv. *auuā*, YAv. *auua*, nom.pl.m. *auue* (OP *avaiv*); acc.pl.m. ⁺*auuē*; nom.acc.pl.neut. *auua* and *auuā* (cf. § 19.1.17); gen.pl.m. *auuaēšqm* (OP *avaišām*); inst.pl.m. *auuāiš*; acc.sg.f. *auuqm* (OP *avām*); gen.sg.f. *auuaŋhā*; abl.sg.f. *auuaŋhāt*; dat.sg.f. *auuaŋhāi*; acc.pl.f. *auuā* and *auuaŋhā* (in a late text); inst.pl.f. *auuabiō* (**-ābiiō*).

§ 22.3 *Relative Pronoun*

The relative pronoun *ya-* ‘which, who’ (Skt. *yá-*, Gr. *ὅς* < PIE **[h₁]i_o-*) follows the same inflection as the pronominal stem *ta-*, *aēta-*, etc. seen above, for which reason the enumeration of all the forms here would be superfluous. Keep in mind that the initial *y-*, in combination with **-i-* in the following syllable results in raising of the *-a-* (§ 7.10), and one therefore finds gen.sg. OAv. *yehiā*, *yeḫiācā*, YAv. *yejhe* (Skt. *yáśya*); gen.sg.f. *yejhā* (Skt. *yáśyās*); abl.sg.f. *yejhāt*, *yejhāδ-a*; loc.sg.f. *yejhe* (v.l. with *ŋh*). Curious are the nom.pl.m. YAv. *yōi* (Skt. *yé*), which did not develop to [†]*yē* (cf. § 10.2.2), and the nom.acc.sg.neut. OAv. *hiiaŋ* (versus YAv. *yaŋ*; Skt. *yát*), which may be the result of external sandhi: ^o*h yaŋ*. On the other hand, the acc.pl.m. form OAv. *yēngs-tū* ‘which you’ apparently arose from a blending of the regular forms, OAv. *yēng* and *yaš^o* (cf. Skt. *yān*, *yāś ca*).

§ 22.4 *Possessive Pronouns*

The possessive pronouns for the 1st and 2nd persons are attested in OAv. alone, while the gen. of the corresponding personal pronouns assumes the functions of the possessive in YAv. Various formations co-occur in the possessive pronouns, as will be seen below.

Singular: The 1st person is formed in OAv. with a stem *ma-* ‘my’ (Gr. *ἐμός* < PIE **h₁mo-*): nom.sg.m. *mā* (§ 7.9.4); gen.sg.neut. *mahiā*; dat.sg.neut. *mahmāi*; inst.sg.neut. *mā*; loc.sg. *mahmī*; nom.acc.pl.neut. *mā*; inst.sg.f. *maiā*; gen.sg.f. *maḫiā* (x cf. § 11.28).

The 2nd person is formed in OAv. with a stem $\theta\beta a-$ ‘your’ (Skt. *tvá-*, Lat. *tuus*, Gr. *σός*): nom.sg.m. $\theta\beta\bar{a}$; gen.sg.m. $\theta\beta ahi\bar{i}\bar{a}$; abl.sg.m. $\theta\beta ahm\bar{a}\bar{t}$; dat.sg.m. $\theta\beta ahm\bar{a}\bar{i}$; inst.sg.m.neut. $\theta\beta\bar{a}$; loc.sg.m. $\theta\beta ahm\bar{i}$; nom.pl.m. $\theta\beta\bar{o}$; nom.acc.pl.neut. $\theta\beta\bar{a}$; nom.sg.f. $\theta\beta\bar{o}$; gen.sg.f. $\theta\beta a\acute{x}i\bar{i}\bar{a}$; loc.pl.f. $\theta\beta\bar{a}h\bar{u}$.

Plural: The 1st person is formed with the stem *ahmāka-* ‘our’ (Skt. *asmāka-*): nom.acc.sg.neut. *ahmākəm*; acc.pl.m. *ahmākəṅg*; inst.pl.m. *ahmākāiš*. For the 2nd person, two familiar variants (already commented upon in § 22.1.4) are found: *xšmāka-* (with the acc.sg.m. *xšmākəm*; nom.acc.sg.neut *xšmākəm*; gen.sg.m *xšmākahiṅ*; dat.sg.m. *xšmākāi*; inst.sg.m. *xšmākā*; acc.sg.f. *xšmākəm*) and *yūšmāka-* (with the acc.sg.m. *yūšmākəm*; gen.sg.m. *yūšmākahiṅ*; dat.sg.m. *yūšmākāi*).

Concerning the pronominal stems OAv./YAv. $x^{\nu}a-$ and YAv. *hauua-*, the FG in *hauua-* may have been introduced from the pers. and dem.pron. in **ha-*. As regards its inflection, $x^{\nu}a-$ follows the pronominal type (e.g., loc.sg.m. YAv. *x^νahmi* (cf. Skt. *svāsmīn*)), while *hauua-* follows the thematic type in all of its forms (cf. § 19.1), e.g., loc.sg.m. *hauue* (cf. Skt. *své*); nom.pl.m. *hauuaṅhō*; gen.pl.m. *hauuanəm* (Skt. *svānām*).

§ 22.5 Interrogative and Indefinite Pronouns

The interrogative and indefinite pronouns in Av. are formed on the basis of the stems *ci-/ca-* and *ka-* ‘who?, some’, the comparison of which with Skt. *kí-*, *ká-* and Gr. *τίς*, *τί*, and especially with OCS *čto*, *kto*, allows for the reconstruction of an IE pron. **k^uid*, **k^uo-s*. In principal, the accented pronouns functioned as interrogatives, while the enclitics functioned as indefinites. However, the indefinite function could also be indicated by postposing the IE particles **k^ue* or **k^uid*; cf. Lat. *quis-que*, OP *kas-ciṅ*, Skt. *kaś-cit*.

1. To *ci-/ca-*, the following forms are found: nom.sg.m. OAv. YAv. *ciš* (cf. Skt. *kíh*), *ciš-cā* ‘someone’, *naē-ciš* ‘no one’; acc.sg.m. YAv. *čim*, OAv. *naē-čim*; nom.acc.sg.neut. YAv. *ciṅ* (cf. Skt. particle *cit*), *naē-ciṅ*, *cim* (cf. Skt. *kīm*), *ciš*; gen.sg.m.neut. OAv. *cahiṅ*; dat.sg.m. YAv. *cahmāi*; loc.sg.m. YAv. *cahmi*; nom.pl.m. OAv. *caiiascā*, YAv. *caiiō*; nom.acc.pl.neut. OAv. *cī-cā*, YAv. *ci-ca*.

2. The same inflection as in the pronouns *a-/ima-*, *ta-*, and *ya-* is found with *ka-*, so there is no need to enumerate forms. Nevertheless, cf. the gen.sg.m. OAv. *kahiṅ*, YAv. *kahe*, *kaḅhe* (Skt. *kásya*). Note further the concurrence of the inst.sg.m.neut. forms Av. *kā* and YAv. *kana* (cf. Skt. *kéna*), the latter of which seems to have been made after the inst.sg.m.neut. of the demonstrative *ana-* (§ 22.2.4; like the inst.sg.m. of *a-/i-/ima-* in § 22.2.1).

§ 23 Prepositions and Preverbs

A distinction between adnominal prepositions and preverbs exists only partially, since the majority of the forms admit of both uses. Prepositions can occur before the noun (i.e., as a preposition *stricto sensu*) or after it (as a postposition), though there is a small number of forms that always precede the noun. The majority of preverbs immediately precede the verb.

In the following list, prepositions/postpositions are given, followed by the case that they govern. Keep in mind that, in large part, these words may also serve as adverbs, the sense of which can be derived without further difficulty from the meaning given for the basic forms. Those forms that are exclusively adverbial will be expressly indicated as such.

1. *aiti* (Skt. *āti*, Gr. *ἔτι*) adv. 'trans-, beyond; sideways'.
2. *aipī* (Skt. *āpi*, Gr. *ἐπί*) + acc. 'above, during; on'; + inst. 'after'. [temporal]
3. *aibī*, *aifī*, *auui*, *aoi* (Skt. *abhī*, Lat. *amb-*) + acc. 'towards; against; for'; + loc. 'around, about'.
4. *aḍairi* (Goth. *undar*) + acc. 'below'.
5. *apā* (Skt. *āpa*, Gr. *ἄπο*, Lat. *ab*) adv. 'away, dis-'.
6. *ana* (Gr. *ἄνα*) + acc. 'on, along'.
7. *ḁānū*, *anu* (Skt. *ānu*) + acc. 'towards, following'.
8. *antara* (Skt. *antār*, Lat. *inter*) + acc. 'between, inside'.
9. *ā* (Skt. *ā*) + acc. 'to; in, on'; + loc. 'on'; + abl. 'since', '(away) from, from'; OAv. + inst. 'for, because'; cf. further § 36.
10. *upā* (Skt. *ūpa*, Gr. *ὑπο*, Lat. *sub*) + acc. 'about, towards; up to, into'; + loc. 'in'.
11. *upairī* (Skt. *upāri*, Gr. *ὑπερ*, Lat. *super*) + acc. 'over, above'; + inst. 'beyond' and in comparison.
12. *us*, *uz-* (Skt. *úd*) adv. 'out, up'.
13. OAv. *tarā*, YAv. *tarō*, *tarasca* (Skt. *tirás*) + acc. 'through, by way of; except'.
14. *paītī* (Skt. *prāti*, Gr. *πρῆτι* [*πρότι*, *πρός*]) + acc. 'against; by, with; through'; + loc. 'by, through'.
15. *pairī* (Skt. *pāri*, Gr. *περί*) + acc. 'around, about'; + abl. 'from, (without)'.
16. *parā* (Skt. *purā*) + acc., abl., or loc. 'before'.
17. YAv. *parō* (Skt. *purás*) + gen. 'in front of, before' + abl. 'by; because of, since, for'.
18. *pasca* (Skt. *paścā*) + acc. 'behind; after'; + gen. 'after, behind'; + abl. or inst. 'after'.
19. *frā*, *fāra-* (Skt. *prā*, Gr. *πρό*) adv. 'along'.

20. *nī*, *nii-* (Skt. *ní*) adv. 'down'.
21. *nīš*, *nīž-* (Skt. *niṣ-*, *nir-*) adv. 'out'.
22. *maṭ* (Skt. *smát*) + inst. 'with, together'.
23. *vī*, *vi-*, *vii-* (Skt. *ví*) adv. 'apart, separately', cf. Lat. *dis-*.
24. *hačā* (Skt. *sácā*) + abl. '(out) of, from; in relation to, according to', with the agent of the passive also 'by'; OAv. + acc. or inst. 'of; by (reason of)'.
25. *hadā*, *hadā* (Skt. *sahá*) + inst. 'together with'.
26. *haθrā* (Skt. *satrá*) + inst. 'together with'.
27. *hām*, *hā(n)*, *ha-*, *həm(-)*, *ham-* (Skt. *sám*) adv. 'together, conjointly'

§ 24 The Verb

Just as is the case for nominal inflection (§ 13), the study and description of the Avestan verbal system must first be contextualized among the old Indo-Iranian languages, thanks to whose comparative study we can reconstruct the pre-history of the Indo-Iranian verb. The Avestan verb has retained some notable archaisms, but at the same time also exhibits clear formal and functional innovations with respect to earlier linguistic stages. The following sections will discuss both of these aspects, making constant reference to Sanskrit and, insofar as possible, to Old Persian.

§ 25 Component Elements

§ 25.1 *The Root. The Stem*

The root is the element on which the verbal system is based, in that it determines the lexical content of the forms that are derived from it. The root is usually subject to ablaut (§ 13.2), though in certain verbal classes it is invariable, such as in the case of denominative formations (e.g., *nəmaxīia-* 'do homage, honor' from *nəmah-* 'homage', etc.; cf. § 26.13). This method of morphological characterization is inherited from Proto-Indo-European, and is of great interest and help for comparison with other Indo-European languages, and especially with equivalent Sanskrit forms, which are often very similar to the Avestan forms.

1. Ablaut serves to characterize each inflectional form and to distinguish verbal stems. The different types of ablaut patterns can show the root in: A. FG/ZG, e.g., 3.sg. OAv. *as-tī*, Skt. *ásti* versus 3.pl. OAv. *h-əntī*, Skt. *sánti* (< PIE **h₁és-ti* : **h₁s-énti*). The FG usually appears in the root or in the infix/suffix of the active singular indicative and injunctive, as well as throughout the entire

paradigm of the subjunctive, active and middle.—B. LG/FG, e.g., in the s-aorist, OAv. *dāiš-/dōiš-* to *dis* ‘point’ (**-āi-/*-ai-*).

Some further examples of ablaut in the root are: *bar* ‘bear’ (PIE **b^her*): Av. pres.ind. *bara-*; caus.ind. *bāraīia-*; perf.opt. *baβriiān*;—*mrū* ‘speak’ (PIE **mleuH*): Av. pres.act.ind. *mraomi*; pres.mid.ind. *mruiē*;—*vaxš* ‘grow’ (PIE **h₂ueks*): Av. caus.ind. *vaxšaiia-*; pres.ind. *uxšīia-*; *zan* ‘generate’ (PIE **ǵenh₁*): Av. pres.ind. *zīzana-*; pass.ind. *zaiia-*; fut.ind. *zqhiia-*.

2. The root’s meaning can be modified through the use of preverbs (§ 23): e.g., the root *dā-* ‘give; make’ forms several compounds: *ā-dā-* ‘accept, receive, take’, *us-dā-* ‘set up, install’, *paiti-dā-* ‘confer’, *para-dā-* ‘grant’, *fra-dā-* ‘try; perform’, *ni-dā-* ‘gather’, *vī-dā-* ‘distribute’. The preverb usually precedes its verb, whether adjacent to or in tmesis from the verb. At times, the preverb appears to be doubled. In late texts, a tendency toward fusion of the preverb and the verb may be observed.

3. The combination of the root with certain affixes (infixes, suffixes, or some combination of these) comprises a lexical unit called the ‘stem’ (cf. § 13.1). Among the different verbal types, a fundamental division can be made between thematic formations (i.e., formations built with the suffixal vowel *-a-* < PIE **-e/o*, known as the ‘thematic vowel’) and athematic formations (all the rest). A characteristic feature of old Indo-European languages is the large number of forms that can be built to a temporal stem, owing to the interaction of the various verbal categories.

§ 25.2 *Diathesis*

Avestan has inherited from Indo-European the distinction between the active and middle voice, each characterized by a specific set of endings for all the tenses and moods. The original function of the middle is to highlight the role of the subject of the verbal action. Oftentimes, the middle can be translated as a passive, e.g., act. *aṣhaṭ* ‘shot (an arrow)’, mid. *aṣhimnaiiā* ‘(arrows that have been) shot’. In other cases, the middle gives the verb reflexive (act. *frapinaoti* ‘fatten’, mid. *frapinuata* ‘swell’) or reciprocal (act. *hacaiti* ‘accompanies’, mid. *hacaiṅte* ‘go together’) value. It should be noted that, even in the parent language, there are many verbs that occur only in a single diathesis, so-called *activa tantum* or *media tantum* verbs: YAv. *saēte*, Skt. *śēte*, Gr. *κεῖται*, Hitt. *kitta*.

The passive does not exist as a separate diathesis, but, as will be seen, the present formation in *-īia-* has passive meaning. In addition, an isolated ending of the 3rd person in *-i*, which goes back to Ilr., is found in the aorist with passive value: Av. *vācī* ‘was said’ (Skt. *á-vācī*), *srāuui* ‘was heard’ (Skt. *śrāvi*); cf. § 32.1.c.

§ 25.3 *Tense*

The expression of tense is carried out through the usage of specific verbal stems (§ 25.1.3). From the point of view of tense, three main stems are distinguishable: present, aorist, and perfect. The future stem is, in fact, a present formation (§ 26.18).

The Avestan tense system, based on these three stems, derives from an aspectual system that is still present in Greek and residual in Sanskrit. This system opposed the imperfective aspect of the present stem (action seen in its development) to the perfective aspect of the aorist stem (action seen as complete in its entirety). The perfect was not part of this aspectual opposition, and served to express a resultative (attained state). It is crucial to distinguish between aspect, which is a binary opposition, and type of action (*Aktionsart*), which is expressed by multiple formations that were always opposed to an unmarked base. From a functional perspective, Old Avestan still retains a large proportion of the old IE system of oppositions, while Young Av. has developed more towards a temporal system based on the opposition present : injunctive (impf.; §§ 31, 37.2).

§ 26 Present Stems

Athematic Formations

1. Root Presents: some roots have ablaut (§ 25.1.1), e.g., *ah-* ‘be’, *mrū-* ‘speak’, *i-* ‘go’, while in others the stem is invariable: *tac-* ‘run’, *hah-* ‘sleep’, *aoj-* ‘speak’.
- 2.a. Presents with partial reduplication (the root has FG/ZG ablaut): e.g., *dadā-/dad-* ‘give; put’ (the two verbs attested in Skt. as *dādāmi* ‘give’ and *dádhāmi* ‘put’ fall together in Avestan), *hiš.hak-/hišc-* ‘follow’ (Skt. *síṣak-/sásac-*).
- 2.b. Presents with total reduplication (intensives): reduplication with the entire FG root, and ablaut FG/ZG in the root. Examples: *carəkərə-* ‘exalt’, *daēdōiš-* ‘show’, *zaozao-* ‘call’.
3. Presents in *-n-*: the root contains an infix with ablauting *-na-/n-* before the final consonant of the root, e.g., *vinad-/viṇd-* ‘find’. Class 9 is a secondary subtype of this type.
4. Presents in *-nu-*: root (generally *aniṭ*) in ZG + an ablauting suffix *-nao-/nu-* (< **-naṭ-/nu-*), e.g., *surunauu-/surunu-* ‘hear’ (IE **kleu-*); *kərənauu-/kərənu-* ‘make, do’.
5. Presents in *-nā-*: root (of *seṭ* origin) in ZG + ablauting suffix *-nā-/n-* (< **-naH-/nH-*): *gərəβnā-* ‘seize’, *frīnā-/frīn-* ‘please’.

These three infixed present formations can be traced back historically to a single type that split apart on account of particular phonological developments and synchronic reanalysis. Thus, class 4. in fact comes from infixed roots that ended in *-u-*, whose stem final sequence **-na- μ -/-n-u-* became productive as an independent suffix: e.g., to *kar* ‘make’, YAv. *kərənaoiti*, Skt. *कृ॒णोति*. Meanwhile, class 5. is usually limited to old *seṭ* roots, i.e., **-na-H-/-n-H-*: e.g., YAv. *gərəβnāiti*, Skt. *ग्र॒भ॒न्नाति*.

Thematic Formations

Thematic formations (characterized by suffixation of the thematic vowel *-a-/-ā-* < PIE **-e-/-o-*, which precedes the ending) were still productive in the Avestan period. Fourteen different formations, which have precise semantic functions only in part, can be distinguished.

6. Root in FG (root-accented; Skt. *bhāvati* type), e.g., *bara-* ‘bear’, *yaza-* ‘worship’, *haca-* ‘follow’. This is the most productive type in Av.
7. Root in ZG (accent on the thematic vowel; Skt. *tudāti* type), e.g., *iša-* ‘set in motion’, *θβərəsa-* ‘cut’.
8. Root in ZG and partial reduplication (Skt. *pībati* type), e.g., *hišta-* ‘stand’, *nišhiḍa-* ‘sit down’, *jayna-* ‘strike’.
9. Root in ZG with *-n-* infix, e.g., *kərəṇta-* ‘cut’ (Skt. *kṛntāti*), *hiṇca-* ‘sprinkle’ (Skt. *siñcāti*). This is a thematization of 26.3.
10. Root in FG + suffix **-ia-*, e.g., *jaiḍiia-* ‘pray’, *mainiia-/mañiia-* ‘think’ (Skt. *mānya-*).
- 11.a. Root in ZG + suffix **-ia-* (root-accented, non-passive, Skt. type *dīvyati*), e.g., OAv. *drujiia-*, YAv. *druža-* ‘deceive’ (Skt. *drūhyati*), *vərəziia-* ‘work’ (Goth. *waurkjan*).
- 11.b. Root in ZG + suffix **-iá-* (passive, Skt. type *nahyáte*), e.g., *miriia-* ‘die’ (Skt. *mriyate*). This type employs active or middle endings without distinction in Av.
12. Root in ZG with reduplication + suffix **-ia-*, e.g., *iziia-* ‘desire’ (< *i-iz-ia-*), *yaēšiiia-* ‘boil’ (< **ia-iš-ia-*).
13. Denominatives with suffix **-ia-*, e.g., *fšuiia-* ‘rear livestock’ (Av. *pasu-|fšu-* ‘livestock’), *bišaziia-* ‘heal’ (cf. Skt. *bhiśáj-* ‘healer’), *viiāxmainiia-* ‘make a speech’ from *viiāxman-* ‘assembly’.
14. Root in ZG + suffix *-aiia-*, e.g., *guzaiia-* ‘hide’, *sadaia-* ‘seem’, *zbaiia-* ‘call’. This type includes some archaic OAv. causative forms with ZG: OAv. *urūdōiia-* ‘make cry’, *urūpaiia-* ‘make sick’.
15. Root in FG (*ā* in an open syllable; § 7.4.6) + suffix *-aiia-* (causative): *raocaiia-* ‘light up’, *dāraiia-* ‘hold’. This type exhibits a distinction between

roots with FG of the root, such as *vaxšaiia-* ‘make grow’ (Skt. *vakṣáya-*), and verbs with LG of the root, e.g., *tāpaiia-* ‘heat’ (Skt. *tāpáya-*). This distinction results from the fact that the root vowel of the causative was a PIE **o*, which has different outcomes depending on its position in the syllable (i.e., BRUGMANN §7.4.6). It should be noted that the causative (sub)type *tāpaiia-* became very productive in Avestan. Cf., for example, the causative of *sū* ‘enlarge’: OAv. *sauuaiia-* (< PIE **kouh₁-éje-*), versus YAv. *sāuuaiia-*, with LG introduced here.

16. Root in ZG + suffix *-sa-* (including the inchoative), e.g., *pərəsa-* ‘ask’ (Skt. *prcchāti*), *tafsa-* ‘become warm’. The suffix *-sa-* continues the PIE suffix **-ske/o-*. Old present formations (non-inchoative, of the type *jasa-* to *gam*), as well as Avestan inchoative formations, fall under this type.
17. Root in ZG + suffix *-ha/sa/ža-* (desiderative). Two subtypes appear here: a. simple: *gərəḥša-* ‘try to grab’;—b. with partial reduplication in *i*: *diβža-* ‘try to deceive’ (cf. Skt. *dīpsati*). The different forms of the suffix are historically explicable from the IIr. suffix **-(H)sa-* in different environments.
18. Root in FG + suffix *-hiiā/siia-* (future), e.g., *vaxšiiā-* to *vac* ‘speak’ (Skt. *vakṣyāti*), *zəhiiā-* to *zan* ‘generate’ (Skt. *janiṣyāti*).

§ 27 Aorist Stems

1. Athematic root aorist (the root has FG/ZG ablaut). The root itself is the stem of the aorist, e.g., *jam-/gəm-/ga-* to *gam* ‘go, come’; *dā-/d-* to the two roots *dā* ‘give; put’; *srauu-/sru-* to *sru* ‘hear’.
- 2.a. Thematic root aorist: ZG of the root + *-a-* (root-accented), e.g., *vīda-* to *vid* ‘find, know’, Skt. *vīda-*; *sīša-* ‘teach’ to *sāh*, Skt. *śīša-*. In some formations, FG of the root appears, but this generally occurs for phonetic reasons: *taša-* (Skt. *tákṣa-*), *hana-* (Skt. *sána-*).
- 2.b. Reduplicated thematic aorist: ZG of the root with partial reduplication in *a* + suffix *-a-*, e.g., *vaoca-* (Skt. *vóca-*) to *vac* ‘speak’, *nqsa-* (**na-nś-a-*) to *nas* ‘disappear’.
3. Sigmatic aorist (athematic): root with ablaut pattern LG (indicative and active injunctive) / FG (other) + **-s-*, e.g., *θrāyḥ-* to *θrā* ‘protect’, *baxš-* to *baj* ‘divide’, *raos-* to *urud-* ‘cry’, *mānḡh-* to *man* ‘think’, *dāiš-/dōiš-* to *dis* ‘point’.

§ 28 Perfect Stem

The perfect stem is an athematic formation with reduplication and ablaut (< *o/zero) in the root. When the root contains or ends in *ī*, the reduplication vowel will be *ī*; when the root contains or ends in *ū*, the reduplication vowel will be *ū*; in all other cases, the reduplication vowel is *a* (or rarely, *ā*).

The root takes FG in the active singular (but *ā* in an originally open syllable, cf. BRUGMANN § 7.4.6), FG throughout the entire subjunctive, but ZG in all other forms. In contrast to the other two stems, the perfect is further characterized by a set of special endings in the active and middle indicative.

Examples of perfect stems are *dīdaii-/dīdī-* to *dī* 'look', *susru-* to *sru* 'hear', *vauuac-/vaoc-* to *vac* 'speak', *bauuar-/baβr-* to *bar* 'bear', *jaym-* to *gam* 'go, come', *vāuuarəz-/vāuuərəz-* to *varz* 'work', *dadā-/dād-/daδ-* to *dā* 'put; give', *hazd-* to *had* 'sit'.

The root *vid* 'find, know' constitutes an exception in that it forms an (inherited) perfect without reduplication: *vaēd-/vōid-/vīd-*.

§ 29 Moods

Avestan possesses five moods, each of which has its own meaning (cf. § 37), and which are expressed through special formations. The subjunctive and optative are formed with suffixes on the three types of primary stems. The *subjunctive* is formed with a suffix *-a-* and primary or secondary endings (without distinction?). The root always takes FG, even in the middle voice. The *optative* employs the (ablauting) modal suffix *-iīā-/ī-* (< PIE **-jeht_r/*ih_r-*) and secondary endings. The present *indicative* uses primary endings, the indicative of the aorist uses secondary endings, while the perfect indicative has its own special endings. The *injunctive* does not carry the augment (§ 31) and is served by secondary endings (with the augment, the imperfect, which serves as the preterite for the present, would be formed). The *imperative* has its own endings.

§ 30 Personal Endings

Personal endings are an essential element for the expression of the various verbal categories. Endings are added to the verbal stem and mark person (3), number (3: singular, dual, plural), and diathesis (2). The endings are multifunctional, in the sense that each one expresses several paradigmatic roles: for example, *-mahī* is a 1st.pers. plural active. In Avestan, just as in IE, there is a basic

TABLE 16 *The verbal endings of the active*

	Primary	Secondary	Imperative	Perfect
1st sg.	-mī; -ā	-m, -am	—	-ā
2nd	-hī, -šī	*-h, -s, -š	-Ø; -dī, -ḍi	-θā
3rd	-tī	-t, -t	-tū	-ā
1st du.	-uuahī	-uuā	—	w.a.
2nd	w.a.	w.a.	w.a.	w.a.
3rd	-tō; -θō	-təm	w.a.	-atarə
1st pl.	-mahī	-mā	—	-mā
2nd	-θā	-tā	-tā	w.a.
3rd	-ṇtī, -atī, -aiṇti	-n, -aṭ; -ārə, -ārəš	-ṇtū	-arə, -ərəš

distinction between primary endings (PE, used in the pres.ind. and, partly, the subjunctive) and secondary endings (SE, used in the pres.inj., the aorist and the optative); in addition, there are other sets of endings for the imperative and the perfect indicative. The subjunctive has a special ending just in the 1.sg.¹⁰

§ 30.1 *Active Endings*

Be aware that some endings are not attested in Avestan; these are marked here as “w.a.” (= without attestation). Those endings with variants conditioned by phonetic environment are given with a comma separating the variants: for example, the secondary ending of the 2.sg., which comes from Ilr. *-s, appears as -š (*mraoš* ‘you said’, cf. § 11.20.5), as -s (before enclitic *-ca*, § 11.20.1), and as the outcome of *-h (in the thematic ending, e.g., *jasō* ‘you came’, cf. § 7.13.1). A semicolon separates endings of different origin, such as those of the 3.du, of which *-tō* corresponds to the original 3.du. ending (cf. Skt. *-tas*), while *-θō* must have been taken over from the 2.du. (cf. Skt. *-thas*). As regards the thematic formations, it must be noted that some forms have been partially disfigured by phonetic developments: e.g., the already cited 2.sg. *-ō* < *-a-h.

N.B.: a. Primary Endings: The agreement with the endings of Skt., sg. *-mi*, *-si*, *-ti* and pl. *-masi*, *-tha*, *-nti/-ati* is evident. The 1.sg. thematic *-āmi* exhibits an *ā*

10 The terms “primary” and “secondary” are traditional; descriptively, the primary endings are derived from the secondary ones by adding an element *-i*, which in PIE was a marker of current relevance (*hic et nunc*).

< PIE **o* (§ 7.4.6); after *ii*, we do not find *-āmi* but *-emi*; here **ā* was analogically replaced by **a*; cf. 7.10.1. On the other hand, a 1.sg. ending *-ā* (Gr. *-ω*, Lat. *-ō* < PIE **-oh₂*), exclusive to thematic formations, also occurs. This distinction between the thematic and athematic conjugations is old, and ceases to be productive in YAv., which adopts the ending *-mi* for both: *°barāmi* (and in Sanskrit: *bhārāmi*).—The 1.du., in comparison with Skt. *-vas*, has taken the **-i* from the 1.pl.

b. Secondary Endings: The agreement of these endings with those of Skt., sg. *-(a)m*, *-s*, *-t*, 1.du. *-va*, pl. *-ma*, *-ta*, *-(a)n/-ur*, is evident.—The 3.du. *-təm* concurs with OP *-tam*, but in Skt., *-tam* is the form of the 2.du., while Skt. *-tām* is the form of the 3.du. In Iranian, the endings of the 2.du. were introduced into the 3.du.; the same happens in the middle (cf. § 30.2.a).—The endings *-ārə* and *-ārəš* are found only in the athematic optative: the *-ā-* is part of the suffix *-iiā-*, and the ending is *-rə(š)*, which corresponds exactly to Skt. *-ur* (3.pl.aor.opt. *buiiṅn* together with *buiiārəš*, Skt. *bhūyúr*). The 3.pl. thematic ending is *-ən*: YAv. *pacaiīən*.

c. The subjunctive has a unique ending in the 1.sg., *-āniš*, which coexists with *-āš*. The 3.du. and the 2.pl. have primary endings, the 1.du. and the 1.pl. have secondary endings. The remaining persons take both PE or SE without distinction (but Skt. has the SE in the 3.pl.)—The **imperative** has forms only for the 2nd and 3rd persons of the sg. and pl. Just as in IE, the 2.sg. can take an ending \emptyset (thematic stems) or, in athematic stems, take the IE/IIr. ending **-d^{hi}* > Gr. *-θi*, Skt. *-dhi/hi*. The remaining Avestan endings also correspond to those of Sanskrit, *-tu*, *-ta*, and *-ntu*. However, the ending that corresponds to Skt. *-tāt*, Gr. *-τω*, Lat. *-tō(d)* is not found. The 2.pl. uses the secondary ending.

d. The perfect has its own set of endings only in the indicative. These endings, in large part, agree with the Skt. forms: sg. *-a*, *-tha*, *-a*, 1.pl. *-ma*. The 3.du. *-atarə* comes out of **-atr*, while Skt. *-atur* reflects **-atrš*, with the same ending **-rš* that Skt. has in the 3.pl., *-ur*. Av. has the 3.pl. in *-arəš* < **-r* (the **-rš* appears only in the “plupf.” *cikōitərəš*).

e. The participles of the present active are formed with the suffix **-nt-* (inflection in § 18.3.); its feminine is marked with the suffix *-ī-* (§ 19.3.): *hənt-*, f. *haiti-*; *šiiqs*, f. *šiieti-*.—The perf.act.part. has its own suffix, *-uuāh-/-uš-* (inflection § 18.8): *vīduuāh-/-vīduš-* (*vid*); *daduuāh-/-daduš-* (*dā*); its feminine takes the suffix *-ī-* (§ 19.3.), e.g., *jaymūšī-* (*gam*; Skt. *jagmūṣī-*).

§ 30.2 Middle Endings

The earlier remarks made in the paragraph above, § 30.1, apply equally to Table 17.

TABLE 17 *The verbal endings of the middle*

	Primary	Secondary	Imperative	Perfect
1st sg.	-ě, -ōi	-ĩ; -ǎ	—	-ě
2nd	-hě, -ŋhě, -šě	*-ha, -ŋhǎ, -šǎ	-huuǎ, -ŋ ^h hǎ, -šuuǎ	w.a.
3rd	-tě; -ě	-tǎ; -ĩ	-tǎm; -ǎm	-ě, -oi
1st du.	w.a.	-uuaidĩ	—	w.a.
2nd	w.a.	w.a.	w.a.	w.a.
3rd	-aētě, -ōiθe; -āitě	-aētǎm; -ātǎm	w.a.	-āitě
1st pl.	-maidě, maiðe	-maidĩ	—	w.a.
2nd	-duiiē, -ðβe, -θβe	-dūm, -ðβǎm	-dūm, -ðβǎm	w.a.
3rd	-ŋtě, -aitě; -re, -āire	-ŋtǎ, -atǎ; -rǎm	-ŋtǎm	-re

N.B.: a. Primary Endings: The endings correspond, in large part, to the series of endings in Skt., sg. *-e* (< *-a_i), *-se* (< *-so_i), *-te* (< *-to_i), 3.du. *-ete* (thematic) and *-āte*, pl. *-mahe* (*-mad^ha_i), *-dhve*, *-nte/ate*.—The 3.sg. has a further ending *-ě*, Skt. *-e*, which is used for verbs with stative meaning; it is the same form as the ending of the 3.sg.perf.mid.—The co-occurrence in the 3.du. of *-aētě* and *-ōiθe* (thematic endings) is explained by the fact that the ending of the 2.du.mid. *-a_iθa_i (Skt. *-ethe*) was adopted by the 3.du. (§ 30.1.b).—The endings of the 3.pl., *-re* and *-āire* (< *-āre; cf. Skt. *-re*) were used in PIE for the stative. They originate in the PIE ending *-ro of the 3.pl. of the middle.

b. Secondary Endings: The endings correspond to the series of endings in Skt., 1sg. *-i/-a*, 3.sg. *-ta*, 1.du. *-vahi* (< *-^uad^hi), 3.du. *-etām* (thematic)/*-ātām*, pl. *-mahi*, *-dhvam*, *-nta/-ata* and *-(i)ram/-(i)ran*—For the 3.du. *-aētām*, it must again be presumed that the final short vowel was introduced from the 2.du. *-a_itam (Skt. has innovated with *-ethām*).—In 3.sg., we find an ending *-ĩ* (Skt. *-i*), which is utilized for the isolated passive aorist (§ 25.2).—The endings of the 3.pl. with *-r-* are endings of the stative, which continues the old PIE middle endings in *-ro with a secondary *-nt, thus *-ront.

c. The subjunctive has a unique ending in the 1.sg. *-āne*, which coexists with the old *-āi* (*-a_i), cf. Skt. *-ai* versus OP *-ānaiy*. The remaining persons of the middle have primary endings.—The imperative shows forms that correspond to endings of Skt., 2.sg. *-sva*, 3.sg. *-tām*, 2.pl. *-dhvam* (= SE), 3.pl. *-ntām*. It is possible that there may have been a “passive” form (parallel to the 3.sg. of the passive aorist, § 25.2): 3.sg. Av. *-qm* (Skt. *-ām*), but the evidence is not conclusive.

TABLE 18 *The use of the augment*

	Unaugmented	Augmented
<i>Present</i>	inj.	impf.
<i>Aorist</i>	inj.	ind.
<i>Perfect</i>	ind.	plupf. (absent in Av.)

d. In the **perfect**, there are very few forms attested, but they agree with the corresponding forms of Skt.: 1.sg. *-e*, 3.sg. *-e*, 3.du. *-āte*, 3.pl. *-re*.

e. The middle **participle** exhibits a suffix *-āna-* (also *-āna-* and *-ana-*; Skt. *-āna-*) in athematic forms and *-mna-* (OP *-mna-*, cf. Skt. *-māna-* versus Pāli *-mina-*) in thematic forms. This distribution of allomorphs is due to the development of the PIE suffix **-mh₂no-* > Ilr. **^oC-ṛHna-* > **-Cāna-* (after a consonant) versus **^oV-mHna-* > **-Vmna-* (after a vowel). The perf.part.mid. makes use only of the suffix *-āna-* (Skt. *-āna-*).

§ 31 The Augment

An accented prefix **é-* (**h₂e-*?), through which indicatives with preterital value were made, existed in Proto-Indo-European. When added to an injunctive present form (the basic, unmarked form), the augment transforms an injunctive into an imperfect; if an augment is added to a perfect stem, it would form a pluperfect. The preterital value of the aorist stem was also formally expressed through aorist injunctive forms with the augment.

The augment is systematically employed in Classical Greek (pres. λύω: impf. ἔλυον), in Sanskrit (*bhárāmi: ābharam*), and in Old Persian (*^obarāmiy: abaram*); its use in Avestan, however, seems to be much more limited, since the majority of preterital forms do not show the augment, the forms of the injunctive serving to express the past tense. This use could be due, in many cases, to the particular content of the texts. In any case, the (new) function of the injunctive in Avestan is not very well understood.

In Old Av., there is no clear evidence for any imperfect forms, while in Young Av., the few imperfect forms seem to have disparate functions (in some cases, it can be interpreted as an anterior to the injunctive).

Descriptively, forms with secondary endings can bear or not bear the augment. In the case of forms without the augment, they are termed ‘injunctives’, following tradition. In the case of forms that bear the augment, they are called

‘imperfects’ (in the present stem) or indicative (in the aorist stem). For its part, the perfect, with its own set of endings, has both forms without the augment, ‘indicatives’, and forms with the augment, ‘pluperfects’.

Furthermore, distinguishing between the augment and the preverb *ā* is often difficult, on account of the partial phonetic confusion between *a* and *ā* in Av., depending upon phonetic environment (e.g., § 7.3). Thus, a form *paitiāmraoṭ* ‘he addressed’ can reflect **paiti ā mraoṭ* (with the preverb *ā*), **paiti amraoṭ* (with impf.), or **paiti ā amraoṭ*.

§ 32 Paradigms

In the following section, we present verbal paradigms consisting of attested forms, with one form to exemplify each person, as well as the distinct phonetic variants that an ending may exhibit (cf. e.g., N.B. under § 30.1). The forms given in the tables belong solely to YAv., except where expressly indicated to the contrary using *italics*. Forms of the *subjunctive* with secondary endings appear in **bold italic** type; historically, these forms are more archaic, but they are in the process of being replaced by primary endings in Avestan.

§ 32.1 *Athematic Root Present and Root Aorist*

Given that the inflection of both of these formations is the same, they are presented together in Table 19. To provide examples of the paradigm, we offer forms from the following **present** stems: *ah-/h-/x-/s-/z-/∅-* ‘be’, *aī-/i-/y-* ‘go’, *aoj-* ‘speak’, *āh-* ‘be seated’, *is-* ‘control, rule’, *jan-/ja-/yn-* ‘kill’, *tac-* ‘run’, *tāš-/taš-* ‘shape, create’, *pā-* ‘protect’, *mrauu-/mrū-* ‘speak’, *vas-/us-* ‘wish’, *vā-* ‘blow’, *saii-* ‘lie’, *sāh-* ‘teach’, *stauu-/stu-* ‘praise’, *šaii-/ši-* ‘dwell’. Likewise, we offer forms from the following **aorist** stems: *car-/kəṛə-* ‘make, do’, *jam-/gəm-/ga-* ‘come’, *caii-/šii-* ‘perceive’, *cōiθ-/ciθ-* ‘show’, *cōiš-/ciš-* ‘gather’, *dar-/dr-* ‘hold’, *darəs-/dərəs-* ‘look’, *dā-/d-* ‘give; put’, *bauu-/bū-* ‘become’, *man-* ‘think’, *mōiθ-/miθ-* ‘throw’, *yaog-/yuj-* ‘yoke’, *van-* ‘win’, *ᵛar-* ‘cover’, *²var-* ‘want’, *varəz-* ‘work’, *rād-* ‘make’, *srauu-/sru-* ‘hear’, *hac-/sc-* ‘follow’.

TABLE 19 *The root present and root aorist: indicative and injunctive*

a. Pres.	Ind.act.	Ind.mid.	Inj./impf.act.	Inj.mid.
1st sg.	ahmi	ni-γne, mruie, <i>aojōi</i>	mraom	<i>aojī</i>
2nd	ahi, vaši	taxše, <i>pājhē</i>	<i>mraoš</i>	<i>pairi-i-aoyžā</i>
3rd	asti, jaiṅti, mraoiti	mrūite, ište, aoxte; mruie, <i>isē</i>	mraoṭ, tāšt, ās	<i>aogādā</i> , aoxta
1st du.	<i>usuuahī</i>	w.a.	w.a.	w.a.
3rd	stō	w.a.	impf. auuāitəm (auua-i-)	w.a.
1st pl.	mahi	mrūmaide	w.a.	w.a.
2nd	<i>stā</i>	w.a.	<i>mraotā</i>	w.a.
3rd	həṅti, yeiṅti, vāṅti	aojaite; āṅhāire, saēre	impf. auuāin	w.a.
b. Aor.	Inj.act.	Inj.mid.		
1st sg.	<i>darəsəm</i>	w.a.		
2nd	<i>cōiš</i> , <i>dā</i> , <i>varəš-cā</i>	<i>dāṅhā</i> , <i>māṅghā</i>		
3rd	<i>jān</i> , <i>dāṭ</i> , <i>mōist</i>	<i>maṅtā</i>		
1st du.	w.a.	<i>duuaidī</i>		
3rd	w.a.	<i>a-sruuātəm</i>		
1st pl.	<i>dāmā</i>	<i>varəmaidī</i>		
2nd	<i>dātā</i>	<i>a-srūdūm</i>		
3rd	<i>gəmən</i> , <i>dəṅ</i> , <i>yūjən</i>	<i>vī-šūiātā</i>		

c. *Passive Aorist*

Within the aorist system, there is an isolated 3rd pers. indicative/injunctive form that adds an ending *-ī* (Skt. *-i*) directly to the aorist stem, in which the root seems to show LG (by BRUGMANN, §7.4.6?). The roots that exhibit this formation are *cīš* ‘gather’, *vac* ‘say’, and *sru* ‘hear’ (and perhaps ²*mrū* ‘mistreat’). Forms of the 3rd.sg.ind./inj. of the passive aor. are: OAv. *cəuuīšī*, *vācī* and *a-uuācī* (Skt. *āvāci*), *srāuuī* (Skt. *śrāvi*). Later, this ending is extended to other secondary formations, such as the present stems *əṛənu-* (*ar* ‘set in motion’), *jan* ‘kill’, or the perfect stem *āδ-* ‘say’: YAv. *əṛənāuuī*, *jainī*, *āīdi*.

TABLE 20 *The root present and root aorist: other moods*

d. Subj.	Pres.act.	Pres.mid.	Aor.act.	Aor.mid.
1st sg.	fra-mrauua, fra-mra- uuāni	mrauūāne; <i>aojāi</i>	<i>yaojā; varānī</i>	<i>mānāi, varānē</i>
2nd	<i>āyhō</i>	w.a.	<i>dāhī</i>	<i>dāyhē</i>
3rd	aḥhaiti, <i>āyhaṭ</i>	w.a.	<i>dāiti; dāṭ</i>	<i>yaož-dāitē,</i> <i>cōiθaitē</i>
1st du.	w.a.	w.a.	w.a.	jamaētē
3rd	w.a.	w.a.	w.a.	w.a.
1st pl.	<i>āyhāmā, aiβi-šaiiama</i>	<i>išāmaidē</i>	darəsāma	w.a.
2nd	w.a.	w.a.	<i>vī-caiiaθā</i>	<i>daduiē</i>
3rd	<i>āyhān, apa.tacin</i>	w.a.	<i>daiṅtī, rādāṅtī; jimān</i>	<i>dāṅtē, yaojaṅtē</i>
e. Opt.	Pres.act.	Pres.mid.	Aor.act.	Aor.mid.
1st sg.	<i>xiūm</i>	w.a.	<i>diiqm</i>	<i>diiā</i>
2nd	mruuiā	mruuišā	jamiā	<i>dīšā</i>
3rd	mruuiāṭ; <i>sāhīt</i>	aojīta	<i>jamiāṭ; vainīt</i>	<i>dritā</i>
1st pl.	<i>xiūāmā</i>	w.a.	<i>jamiāmā, buiiama;</i> <i>srēuuīmā</i>	<i>mainimaidī</i>
2nd	<i>xiūātā</i>	w.a.	dāiata	w.a.
3rd	hiiārē	w.a.	jamiārēš; jamiiaṅ	w.a.
f. Impv.	Pres.act.	Pres.mid.	Aor.act.	Aor.mid.
2nd sg.	mruīdi, <i>zdi, idi</i>	w.a.	<i>dāidi</i>	<i>kārēšuuā,</i> <i>dāhuuā</i>
3rd	mraotu, <i>astū</i>	w.a.	<i>dātū</i>	w.a.
2nd pl.	staota	w.a.	<i>dātā</i>	w.a.
3rd	yaṅtu, <i>hāṅtū</i>	w.a.	<i>scaṅtū</i>	w.a.
g. Part.	Pres.act.	Pres.mid.	Aor.act.	Aor.mid.
	<i>hāṅt-, f. haitī-; mruuaṅt-</i> nom.sg.m. <i>šūqs,</i> f. <i>šūeitī-</i>	<i>mruuāna-,</i> <i>aojana-</i>	<i>daṅt-</i>	sr(a)uana-

§ 32.2 *Athematic Reduplicated Present*

To provide examples of the paradigm, we offer forms of the following present stems (with partial reduplication): *kuxšnu-* (*xšnu* ‘greet’), *cikaii-* (*ci* ‘perceive’), *dadā-/dad-* (*dā* ‘give; put’), *didaii-/dīdi-* (*dī* ‘watch’), *mim-* (*mā* ‘measure’), *zazā-/zaz-* (*zā* ‘leave’), *zaz-* (*zā* ‘rise’), *hiš.hāk-/hišc-* (*hac* ‘follow’). The rare forms with total reduplication (§ 26.2.b.) have the same endings.

TABLE 21 *The reduplicated present*

	Ind.act.	Ind.mid.	Subj.act.	Subj.mid
1st sg.	daḍami	daiθe, <i>dadē</i>	daθāni	yaož-daθāne
2nd	daḍāhi	w.a.	zazāhi; <i>yaož-daθō</i>	w.a.
3rd	daḍāiti	daste, <i>dazdē</i>	yaož-daθāiti; <i>daθaṭ</i>	daθaite
3rd du.	w.a.	zazāite	cikaiiatō	w.a.
1st pl.	<i>dadəmahī</i>	<i>dadəmaidē</i>	<i>daθāma</i>	<i>hišcamaidē</i>
2nd	w.a.	w.a.	<i>fra-mīmaθā</i>	w.a.
3rd	<i>dadaitī</i>	w.a.	zazəṅti, <i>daθəṅ</i>	yaož-daθəṅte
	Inj.act.	Inj.mid.	Opt.act.	Opt.mid.
1st sg.	daḍam, <i>dīdaēm</i>	w.a.	w.a.	daiḍe
2nd	<i>dadā</i>	w.a.	daiḍiš; daiθiiā	daiθiša
3rd	daḍāt, <i>didqə</i>	dasta, <i>dazdā</i>	daiḍiṭ; daiḍiiāt	daiθiṭa, <i>daidītā</i>
3rd du.	w.a.	w.a.	daiḍitəm	w.a.
3rd pl.	ā-dadaṭ	w.a.	daiθiiṭ; daiθiiārəš	w.a.
	Impv.act.	Impv.mid.	Part.act.	Part.mid.
2nd sg.	dazdi	<i>dasuuā</i>	daḍat-, daθat-; yaož-daθəṅt-	daθāna-, <i>kuxšnuuṇa-</i>
3rd	<i>dadātū</i>	w.a.		
2nd pl.	dasta	<i>məz-dazdūm</i>		

§ 32.3 *Presents in -n, -nu, and -nā*

In what follows, we present a synopsis of all types of presents with a nasal infix. Membership in each specific type of formation will be expressly indicated (in the text and in the tables) using the following numbering system: 1 presents in *-n*; 2 presents in *-nu*; 3 presents in *-nā*.

To provide examples of the paradigm, we offer forms of the following stems: 1. *cinath-* to *ciθ* 'show', *cinah-/ciš* (< **ciNš-*; cf. § 7.15) to *ciš* 'gather', *mərənc-* to *marc* 'destroy', *minas-* to *mīias* 'mix', *vinad-/viṇd-* to *vid* 'find'; 2. *əranauu-/əranu-* to *ar* 'set in motion', *kəranauu-/kəranu-* to *kar* 'make, do', *tanauu-/tanu-* to *tan* 'stretch', *dəbanauu-* to *dab* 'deceive', *vəranauu-/vəranu-* to *var* 'cover', *spašnauu-/spašnu-* to *spas* 'watch', *srinauu-/srinu-* to *sri* 'lean on', *surunauu-/surunu-* to *sru* 'hear', *hunauu-/hunu-* to *hu* 'press out'; 3. *gərəβnā-* to *grab* 'seize', *dərən-* to *dar* 'tear', *pərənā-/pərən-* to *par* 'fight', *frīnā-/frīn-* to *frī* 'please', *vərən-* to *var* 'want', *stərənā-/stərən-* to *star* 'deploy, scatter', *hunā-/hun-* to *hū* 'impel'.

TABLE 22 *Nasal presents*

	a. Ind.act.	Ind.mid.	b. Subj.act.	Subj.mid.
1st sg.	1. <i>cinahmī</i> 2. <i>kəranaoimi</i> 3. <i>frīnāmi</i>	3. <i>pərəne</i>	2. <i>kəranauuāni</i> ; <i>tanaaua</i> 3. <i>frīnāni</i>	2. <i>kəranauuāne</i> 3. <i>pərənāne</i> ; <i>frīnāi</i>
2nd	3. * <i>hunāhi</i>	w.a.	2. * <i>ni-srinauuāhi</i>	w.a.
3rd	1. <i>cinasti</i> 2. <i>kəranaoiti</i> 3. <i>gərəβnāiti</i>	1. <i>mərəγəṇte</i> (* <i>mərəṇte</i>) 2. <i>vərənūite</i> 3. <i>vərəṇtē</i>	2. <i>hunauuāt</i> 3. <i>frīnāt</i>	2. <i>vəranauuaitē</i> 3. <i>pərənāite</i>
3rd du.	2. <i>hunutō</i>			
1st pl.	1. <i>cišmahī</i> 3. <i>frīiṇmahī</i> < * <i>frīṇmahī</i>	1. <i>cišmaide</i>	w.a.	1. <i>cinaθāmaide</i>
2nd	2. * <i>spašnuθā</i>	1. <i>mərəṅgəduiē</i>		
3rd	1. <i>mərəṇciṇti</i> 2. <i>kəranuuaiṇti</i> 3. <i>frīnəṇti</i>	1. <i>mərəṇcaitē</i>	2. <i>kəranəon</i> 3. <i>gərəβṇəṇ</i>	2. <i>əranauuəṇte</i>

	c. Inj.act.	Inj.mid.	d. Opt.act.	Opt.mid.
1st sg.	w.a.	w.a.	w.a.	2. tanuīia
2nd	1. <i>minaš</i>	w.a.	2. surunuiiā 3. ^{xo} stərəniā?	w.a.
3rd	1. <i>cinas</i> 2. <i>kərənaoṭ</i>	2. <i>hunūta</i> 3. <i>vərəṇta</i>	1. <i>cīšiiāṭ</i> 2. <i>kərənuiiāṭ</i>	1. <i>mərəṇcīta</i>
3rd du.	w.a.	w.a.		w.a.
2nd pl.	2. <i>dəbənaotā</i>	w.a.		
3rd	1. <i>viṇḍəṇ</i>	3. <i>vərənātā</i>	1. <i>cīšiiā</i> 2. ⁺ <i>hunuiiārəš</i>	w.a.
	e. Impv.act.	Impv.mid.	Part.act.	Part.mid.
2nd sg.	1. <i>cīždī</i> 2. <i>kərənūidi</i> 3. <i>pərənā</i>	w.a.	2. <i>kərənuiiānt-</i> 3. <i>dərənānt-</i> f. <i>uruūinaitī-</i>	1. <i>viṇḍāna-</i> 2. <i>hunuiiāna-</i>
2nd pl.	2. <i>srinaota</i>	w.a.		
3rd	3. <i>fīṇəṇtu</i>	w.a.		

§ 32.4 Thematic Presents and Aorists

To provide examples of the paradigm, we offer forms of the following stems: **pres.** *xraosa-* ‘shout’, *xšaiia-* ‘rule, control’, *gūša-* ‘hear’, *cara-* ‘go’, *jaiḍiia-* ‘pray’, *jasa-* ‘come’, *juua-* ‘live’, *taca-* ‘run’, *tauruuīia-* ‘conquer’, *daoīia-* ‘be deceived’, *dāraīia-* ‘hold’, *dīdrayža-* ‘want to hold’, *θrāīia-* ‘protect’, *pərəsa-* ‘ask’, *bauua-* ‘become’, *bara-* ‘bear’, *nasīia-* ‘disappear’, *maniia-* ‘think’, *yasa-* ‘take’, *yaza-* ‘worship, sacrifice’, *yūiḍiia-* ‘fight’, *vərəca-* ‘pull apart’, *vərəziia-* ‘work’, *vīsa-* ‘serve’, *srāuuīia-* ‘proclaim’, *srarāīia-* ‘lean’, *zaiia-* ‘be born’, *haca-* ‘follow’, *hišta-* ‘stand’; **aor.** *vaoca-* ‘say’.

TABLE 23 *The thematic present and aorist*

	a. Ind.act.	Ind.mid.	b. Subj.act.	Subj.mid.
1st sg.	barāmi, jaiḍiieimi <i>p̄arāsā</i>	baire, ā-iiese	barāni, srāuu- aiieni; <i>xšaiiā</i>	<i>jasāi</i>
2nd	barahi, jaiḍiiehi	hištahe, xšaiiehe	barāhi; <i>srāraiiā</i>	p̄arəsāḡhe
3rd	baraiti, nasiieti	baraite	jasāiti; <i>jasāt</i>	yazāite
1st du.	w.a.	w.a.	<i>juuāuuu</i>	w.a.
3rd	baratō; yūiḍiiaθō	visaēte; fra-carōiθe	jasātō	w.a.
1st pl.	barāmahi	barāmaide	<i>juuāmahi; ba- rāma</i>	w.a.
2nd	<i>xšaiiaθā</i>	fra-caraθβe; <i>dīdray- žō.duiē</i>	w.a.	w.a.
3rd	barəṅti, bauuaiṅti, taciṅti, jaiḍiieṅti	visəṅte, θrāiieṅte, haciṅte	barāṅti; <i>barqṅ</i>	zaiiāṅte
	c. Inj./impf.act.	Inj./impf.mid.	d. Opt.act.	Opt.mid.
1st sg.	barəm, abaom vī-ḍāraēm	baire	w.a.	<i>isōiiā</i>
2nd	jasō	zaiiaṅha	vī-ḍāraiiōiḥ	yazaēša
3rd	jasat	zaiiata	jasōit	maniiāeta
3rd du.	jasatəm	<i>jasāētəm</i>	w.a.	a-p̄arəsaiiatəm
1st pl.	aor. <i>ā-uuaocāmā</i>	w.a.	jasāēma	<i>vaēnōimaidī, būiḍiioimaiḍe</i> ¹¹
2nd	tauruuaiiata	w.a.	frā-θβərəsaēta	rāmōiḍβəm
3rd	jasən, baon	mainiiaṅta, fraorəci- ṅta, <i>visəṅta</i>	baraiiən, kāraiiən	yazaiiāṅta
	e. Impv.act.	Impv.mid.	f. Part.act.	Part.mid.
1st sg.	jasa, nase	baraṅ ^h ha, <i>gūšahuuā</i>	jasāṅt-, vərəziiāṅt-/	barəmna-, hacimna-,
2nd	baratu	vərəziiātəm	vərəziṅt-	a-ḍaoiiamna-
2nd pl.	barata	dāraiiāḍβəm, <i>gūšōdūm</i>		
3rd	barəṅtu	<i>xraosəṅtəm</i>		

11 With primary ending!

§ 32.5 *Sigmatic Aorist*

To provide examples of the paradigm, we offer forms of the following aorist stems: *uruuaxš-* (*uruuaj* ‘walk’), *xšnaoš-* (*xšnu* ‘greet’), *θβarš-* (*θβars* ‘cut, shape’), *θrāṅh-* (*θrā* ‘protect’), *darəš-* (*dar* ‘hold’), *dāṅh-* (*dā* ‘put’), *dāiš-/dōiš-* (*dis* ‘point’), *frasš-* (*fras* ‘ask’), *baxš-* (*baj* ‘divide’), *naš-* (*nas* ‘bring’), *naēš-* (*nī* ‘lead, guide’), *məṅgh-/māh-* (*man* ‘think’), *vaṅh-/vəṅgh-* (*van* ‘win’), *varəš-* (*varz* ‘work’), *važ-/vaš-* (*vaz* ‘go, lead’), *raēxš-* (*iric* ‘abandon, remove’), *rāh-/rāṅh-* (*rā* ‘bestow’), *sqš-* (*saṇd* ‘appear’), *stāṅh-* (*stā* ‘stand’), *zāh-* (*zā* ‘leave’).

TABLE 24 *The sigmatic aorist*

	a. Ind./inj.act.	Ind./inj.mid.	b. Subj.act.	Subj.mid.
1st sg.	w.a.	<i>frašī</i> ; <i>məṅghī</i>	<i>varəšā</i>	<i>xšnaošāi</i> , <i>məṅghāi</i> ; <i>varəsānē</i>
2nd	<i>dāiš</i>	w.a.	w.a.	<i>rāṅhahōi</i>
3rd	<i>dārəšt</i> , <i>sqš</i> , <i>vqš</i>	<i>xšnaošta</i> , <i>mąšta</i>	<i>stāṅhaiti</i> , <i>varəšaitī</i> <i>baxšaitī</i> ; <i>vəṅghaṭ</i> , <i>naēšaṭ</i>	<i>varəšaitē</i> ; <i>vašata</i>
1st pl.	w.a.	<i>a-məhmaidī</i>	<i>nāšāmā</i>	w.a.
2nd	w.a.	<i>θβarōždūm</i>	w.a.	<i>maz-dāṅhō.dūm</i>
3rd	<i>uruuāxšaṭ</i>	w.a.	<i>varəšəṅtī</i> ; <i>xšnaošəṅ</i> , <i>vəṅghəṅ</i>	<i>vašāṅte</i>
	c. Opt.act.	Opt.mid.	d. Impv.act.	Impv.mid.
1st sg.	w.a.	w.a.		
2nd	w.a.	<i>raēxšiša</i>	<i>dōišī</i>	<i>fərašuuā</i>
3rd	<i>fra-zahīt</i>	w.a.		
1st pl.	<i>nāšīma</i>	w.a.		
2nd	w.a.	w.a.	<i>sqštā</i>	<i>θrāzdūm</i>
3rd	<i>aēšiiṅ</i>	w.a.		
	e. Part.act.	Part.mid.		
	<i>vaṅhəṅt-?</i>	<i>maṅhāna-</i>		

§ 32.6 *Perfect*

To provide examples of the paradigm, we offer forms of the following perfect stems: *ād-* (to *ad* 'say'), *āh-* (*ah* 'be'), *īiei-* (*i* 'go'), *irīriθ-* (*iriθ-* 'die'), *urūraod-* (*urud* 'obstruct'), *cikōit-/cicit-* (*cit* 'understand'), *jaγm-* (*gam* 'come'), *jaγār-* (*gar* 'wake'), *jaγauruu-* (*grab* 'seize'), *jigaē-* (*jī* 'live'), *dadā-/dād-/dad-*, *pāfr-/pafr-* (*par* 'fill'), *mamn-* (*man* 'think'), *yaiiat-/yaēt-/yōit-* (*yat* 'occupy a position'), *vauuan-/vaon-* (*van* 'win'), *vauuac-/vaoc-* (*vac* 'say'), *vauuaz-/vaoz-* (*vaz* 'go, lead'), *vaēd-/vōid-* (*vid* 'find'), *vaorāz-* (*uruuāz* 'be glad'), *rar-* (*rā* 'bestow'), *susru-* (*sru* 'hear').

TABLE 25 *The perfect*

	a. Ind.act.	Ind.mid.	b. Subj.act.	Subj.mid.
1st sg.	jaγauruua, vaēdā	susruie	w.a.	w.a.
2nd	dadāθa, vauuaxða, vōistā	w.a.	w.a.	w.a.
3rd	jaγauruua, jaγāra, vaēða, āŋha; urūraost	pafre, daiðe	vaēθaṭ	+pafraite
3rd du.	yaētatarə	mamnāitē	w.a.	w.a.
1st pl.	sūsruma, yaēθma	w.a.	w.a.	w.a.
2nd	w.a.	w.a.	vaorāzathā	w.a.
3rd	irīriθarə, āŋharə; cikōitərəš	+raire	vaēθəŋti, iieian	w.a.
	c. Opt.act.	Opt.mid.	d. Part.act.	Part.mid.
1st sg.	jaγmiiam	w.a.	irīriθuš-,	irīriθāna-
2nd	w.a.	jiyaēša	vīðuuāh-/viduš-,	
3rd	vaoniiāt, āŋhāt	w.a.	f. jaγmūši-	
3rd du.	āŋhāt.təm	w.a.		
2nd pl.	w.a.	w.a.		
3rd	+daiðin; baβriian	vaozirəm		

§ 33 *Non-Finite and Nominal Forms*

Some formations have a double nature, in that they simultaneously show properties of both verb and noun. Formally, they have nominal character in virtue of being declined or bearing specifically nominal suffixes, while they belong to the verbal system insofar as they are able to express tense, voice, and/or aspect.

These formations include infinitives, participles (which have already been discussed above; cf. §§ 30.1.e, 30.2.e), as well as various verbal nouns and adjectives. The most important formations will be treated in the following paragraphs.

1. The **infinitive**: The majority of formations categorized as infinitives show an ending **-ai* (OAv. *-ōi*, YAv. *-e*), which matches the ending **-ai* of the dat.sg. in nominal inflection (§ 18.1.7); hence, one can infer that the infinitive originally marked the goal of a verbal action. The Avestan infinitive occupies an intermediate position between the original use as a verbal noun (taking part in nominal inflection) and use as an impersonal verbal form (being incorporated into the verbal system).

The infinitive in *-diiāi* (Skt. *-dhyai*) is added to the root in the ZG (e.g., *srūidiāi* to *sru* ‘hear’), or to the present stem (e.g., *θrāiiōidiāi* built on *θrāiia-* ‘protect’). This suffix provides a middle voice infinitive. Other suffixes that are added either to the root or to the verbal stem are: *-tōi/-te*: *mrūite* ‘to say’, OAv. *stōi* ‘to be’; *-uuanōi/-uuāñē*: OAv. *vīduuanōi* to *vid* (cf. the Gr. inf. suffix *-φεναι*, εἴδεναι, Cypriot *δοφεναι*); *-uuōi/-uee*: OAv. *dāuuōi* ‘to give’; the infinitive in *-he*: OAv. *vaocajhē* ‘say’ is formed from the present stem.

2. The verbal **action noun**, formed with the accented PIE suffix **-tí-* and ZG of the root, is also found in Avestan with the same function: *kərəti-* ‘act, deed’ to *kar*, *maiti-* ‘thought’ to *man*. In Av., forms with FG of the root also occur, e.g., *xʷarəti-* ‘food’ to *xʷar*, which prove that the suffix remained productive until a late period. The majority of nomina agentis are attested in the dat.sg. **-aiai* (*-āe*, *-āiiaēca*), and, given that the finality of the verbal action is thereby expressed, this formation comes very close to usage as an infinitive.

3. The **perfect passive participle** is formed with a suffix *-ta-* added to the root in the ZG: *kərəta-* ‘done’ to *kar*, *druxta-* ‘tricked’ to *druj*, *basta-* ‘bound’ to *band*, *gata-* ‘come’ to *gam*. This formation continues the old PIE verbal adjective with ZG of the root and accented suffix **-tó-*: cf. Skt. *gatá-*, Gr. *βατός*, Lat. *uentus*, from PIE **gʷm-tó-* ‘come’. However, the adjective *-ta-* was productive into younger stages of the language. Hence, forms with FG occur, to set roots (i.e., in *-ā*), and to some roots whose ZG formally obscured its paradigmatic connection to the rest of the finite forms: *dāta-* ‘put’ to *dā* (cf. Skt. *hitá-* with ZG < **dʰh₁-tó-*), *rāta-* ‘bestowed’ to *rā*, *tašta-* ‘constructed’ to *taš*, *yašta-* ‘honored’ to *yaz* (cf. Skt. *iṣṭá-* with FG) and *baxta-* ‘distributed’ to *baj* (Skt. *bhaktá-*).

Syntax

§ 34 Syntax

The functions of the various nominal and verbal formations are, in large part, described in the chapter on morphology. In this chapter, details that concern the functioning of the constituent elements in the phrase are the focus of discussion.

§ 35 Number

An important feature is agreement of the nom.pl.neut. with a verb in the singular, which is consistent in OAv., but only sporadic in YAv., which prefers the plural: Y 29.4 *sax^vārē ... yā zī vāuuərəzōi* (3.sg.perf.mid.ind. to *varz*) ‘insults that have been made’. Avestan has preserved here an important archaism, in which Sanskrit, Greek, and also Hittite share.

Dual forms are usually found in three different situations: 1. in conjunction with the number *duua-* ‘two’: Yt 5.131 *duua auruuanta yāsāmi* ‘I ask for two coursers’; 2. in relation to a natural pair: Yt 10.91 *frasnātaēibiia zastaēibiia* ‘with both hands washed’, OAv. Y 32.10 *vaēnaǰhē ašibiā* ‘in order to see with his eyes’; 3. in a dvandva, i.e., a compound in which both members are coordinated with one another. Each member of the compound takes the dual: Y 9.4 *pasu vīra* ‘cattle and men’, *miθra ahura* ‘Miθra and Ahura’ (cf. Skt. *mitrāvāruṇā* ‘Mitra and Varuna’).

Old Av. always employs verbal forms in the dual to refer to two entities together; in Young Av., the dual is disappearing, gradually being substituted by the plural. The dual is, though, still regularly used to refer to natural pairs and in dvandvas: Y 12.5 *apərəsaētəm mazdāscā zaraθuštrascā* ‘M. and Z. discussed’. The number ‘two’ usually takes plural forms or, in late texts (cf. § 40.2, 41.1), even the singular: Vd 2.41 *duua nara us.zaiieṇti* ‘two men are born’; Vd 7.52 *duua mainiiu rēna auua.stāṇhaṭ* ‘the two spirits will begin battle’.

§ 36 Case Syntax

1. The **nominative** is the case of the subject, as well as the case of any predication that refers to the subject. The nominative can also assume the function of the vocative, which has its own endings only in the singular. The **vocative** is used for appellative functions, and serves to directly address a referent. If several vocatives occur in a clause, they are usually coordinated asyndetically: *mazdā ašā* ‘Mazdā and Aša!’. The **accusative** functions as the direct object of transitive verbs. Also used is the accusative of direction, in order to indicate the end or the direction of a verbal action: Y 46.1 *kam zqm aiiēnī* ‘to which land will I go?’. The accusative of (temporal or spatial) extension is also a common function: Y 65.5 *haminamca zaiianamca* ‘in summer and in winter’, Vd 3.17 *θrigāim haca* ‘three steps from’. Finally, the accusative of relation occurs: *cuuat drājō* ‘how long?’, Yt 5.98 *īstīm səuuīšta* ‘mighty in heritage’. Meanwhile, constructions with a double accusative (some of doubtless antiquity) are not foreign to Av.: Y 11.5 *yō mām taḡ draonō zināt vā trāfiāt vā* ‘who leaves me this share or robs me of it’ (cf. Skt. *indro marutaḥ sahasram ajināt* ‘Indra left a thousand to the Maruts’; OP *xšačamšim adam adinam* ‘I left the kingship to him’).

2. The **genitive** is the case of nominal dependency, and thus serves to express an enormous range of functions (appurtenance, material, partitive, temporal, etc.), which are also present in the other IE languages: Y 4.23 *atarš puḡra ahurahe mazdā* ‘fire, son of Ahura Mazdā’, Yt 10.98 *yō āsištō yazatanam* ‘who is the quickest among the Yazatas’, Vd 9.2 *upa.θbaršti uruuaranam* ‘he cuts (a certain quantity) of plants’. On the other hand, the genitive also functions as the obligatory complement of many verbs (*is* ‘provide’, *xšā* ‘order’, *baj* ‘apportion’, etc.): Yt 17.21 *upa mē sraiian’ha vāšāhe* ‘lean on my cart’, Y 58.4 *fšūš carəkəmahī* ‘we celebrate the cattle-herder’.

The **ablative** case has its own forms only in part (§14.15, 15.3, 16.6). The ablative refers to a point of departure (origin): Yt 17.13 *uštṛāṅhō uzaiiantō zəmaḡ* ‘camels that rise from the earth’. The ablative functions as the obligatory complement of many verbs (*nas* ‘disappear’, *rah* ‘depart’, *miθ* ‘deprive’, etc.): Y 9.28 *yastām xšāθāt mōiθaḡ* ‘who deprives him of sovereignty’. The ablative is used especially with verbs of salvation, purification, and protection: Aog 57 *yahmaḡ haca naēcīš bunjaiiāt* ‘from which no one may be saved’. An important further use is as the proper case for the second element of a comparison: Y 45.11 *nōiḡ mōi vāstā xšmaḡ aniō* ‘I have no other shepherd than you [pl.]’

3. The **dative** governs a referent to whom the verbal action is directed. It is used to indicate the person who is advantaged or disadvantaged by what occurs: Y 29.10 *aēbiū aogō dātā* ‘give them strength’, Vd 15.12 *ptərəbiū āstriēiti* ‘he sins against his parents’; it also indicates that the person has a stake in the

outcome of the action (ethical dative): Y 45.5 *yōi mōi ahmāi səraošəm dən* ‘they who gave him obedience for me’. A temporal usage is also in evidence: Vd 4.45 *maidūiāi asnəmca xšafnəmca* ‘at midday and at midnight’.

The **instrumental** expresses a referent that participates in the verbal action with the subject or the object; this referent can be instrumental proper, comitative, causative, or agentive: Y 57.10 *snaiθiša xʷarəm jaiṅti* ‘with the weapon, he struck [him] a wound’, Y 29.2 *yā drəguuō.dəbiš aēšəməm vādāiōiṭ* ‘who gives chase to anger along with the liars’, Y 47.2 *ōiūā cisti* ‘for (the sake of) this idea’. In quasi-adverbial use, the instrumental indicates a feature or characteristic: Yt 5.61 *mərəyahe kəhrpa* ‘with the body of a bird’.

The **locative** governs a referent in which or even towards which the verbal action takes place. For example, Y 11.6 *ahmi nmāne zaiiāṅte* ‘they will be born in this house’, Y 50.4 *ā paiθi dāmānē* ‘on the way to the house’. A temporal usage is also in evidence: Vd 21.3 *ušahuua bišaziāt* ‘he should heal [it] in the morning’.

§ 37 The Use of Verbal Moods

1. The present **indicative** expresses a real and current state of affairs, whether it be specific or general, whether a single or repeated action: Yt 17.17 *kō ahi yō məm zbaiehi* ‘who are you who calls upon me?’, Y 65.3 *vīspā imā āpō yā zāmā paiti frataciṅti* ‘all these waters which run across the earth’. The perfect indicative refers to the result of an action in the past, or an action that contributed to the formation of a present state: Y 1.1 *niuuaēδaiēmi daθušō ... yō nō dada* ‘I worship on account of the creator ... who has created us’, Y 9.1 *kō narə ahi yim azəm vīspāhe aṅhāuš astuuatō sraēštəm dādarəsa* ‘who, o man, are you, the most beautiful whom I have seen in all my mortal life?’

2. The present and aorist **injunctive** refer to a real past event, without any indication as to the perfectivity or imperfectivity of the verbal action. Moreover, there seems to have been no functional difference between the few aorist indicative forms and the aorist injunctive. The injunctive is the mood of narration *par excellence*; it is thus functionally equivalent to the imperfect of Sanskrit or Old Persian. It is used profusely in the great mythological and cosmogonic narratives, and in doctrinal and didactic texts: Y 19.1 *pərəsaṭ zaraθuštrō ahurəm mazdəm* ‘Z. asked AM’. Independent of the mood of the main clause, the injunctive is always used in any subordinate clause that refers to an real past event. The injunctive is the mood employed in prohibitive statements (§ 39.2).

As was already mentioned in § 31, it is difficult to find unmistakable forms of the imperfect (such as, for example, forms belonging to *ah* ‘be’ or *i* ‘go’). Moreover, its use does not seem to differ fundamentally from the use of the

injunctive, although some rare passages may be noted in which the imperfect expresses an action prior to the action expressed by the injunctive: Yt 5.68 *tqm yazata jāmāspō yaṭ spāḍəm pairi.auuaēnaṭ* ‘Jāmāspa sacrificed to him once he had caught sight of the army’.

3. The present and aorist **subjunctive** indicate an action that has not yet been initiated, and which will be actualized only if certain conditions hold. From this point of view, the subjunctive takes on a voluntative value (very close to a future) for the 1st pers. in main or independent clauses: Yt 19.47 *aētaṭ x^varənō hangrəfšāne* ‘I want to seize that x^varənah’; in the 2nd pers., a strongly prescriptive (almost imperatival) value is observable: Vd 18.51 *iməm tē narəm nisirinaomi iməm mē narəm nisirāriiā upa sūrəm frašō.kərətīm* ‘I entrust this man to you; return this man to me upon [the day of] the mighty frašō.kərətī’; in the 3rd pers. (sometimes also in the 1st), a consecutive (sequential) value, depending on a previous process, can be felt: Yt 1.9 *yazaēša məm zaraθuštra ... jasāni te auuaṛjhaēca rafnaṛjhaēca azəm yō ahurō mazdā* ‘make sacrifices to me, o Zarathustra ... I, who am Ahura Mazdā, will come to you in aid and assistance [of you]’; Vd 2.23 *θriṣtaṭca gēuš apa.jasāt* ‘and a third of the cows will perish’.

The subjunctive is used to ask about an action which has not yet been initiated: Vd 8.12 *cāiō āaṭ aēte maēsma aṅhan yaēibiō frasnaiānte varəsāśca tanūmca* ‘which are the (kinds of) urine with which hair and body should be washed?’ The perfect subjunctive is a rare YAv. formation, which expresses prospective anteriority: Yt 8.39 *tīštrīm yazamaide ... yō pairikā titāraieiti yā uzānhaṭ aṅrō mainiiuš* ‘we worship Tištria ... who passes [i.e., kills] the Pairikas, which Angra Manyu would have sent up’.

4. The **optative** instantiates a number of disparate functions. **a.** Above all, the optative is used in a main or independent clause with direct speech, and its usage implies that the speaker wants for the verbal action to be realized by the interlocutor (cupitative): Yt 10.23 *apa nō haca qzanhaṭ miθra barōiš* ‘bring us away from fear, o Miθra’. A related usage is the prescriptive optative, which is very common in the Vidēvdād: Vd 21.5 *xuziara uzīra huuarəxšaēta* ‘arise, get up, o solar orb’. **b.** The optative also serves in the expression of comparisons and similes involving an imaginary action: Yt 8.55 *tīštriiō ... pairikəm ādarəzaiieiti ... mənaiēn ahe yaθa hazanrəm narəm ōim narəm ādarəzaiiōiṭ* ‘Tištria holds the Pairikā like a thousand men would hold a single man’. **c.** Likewise, the present optative (almost always with the augment) functions as a past tense iterative. This usage has left traces in many Old, Middle, and Modern Iranian languages; this function could, therefore, go back to Proto-Iranian. Vd 19.27 *kuua tā dāθra paiti hanjasənti mašiiō astuuaiṅti aṅhuuō hauuāi urune para.daiḍiiāt* ‘where do the donations go, which the mortal has been offering for his own spirit throughout his bony life?’

d. The aorist optative occurs only in direct speech. This usage, termed ‘precativ’, seems to have been the product of a Proto-Indo-Iranian specialization: Y 70.4 *yaθa īža vācim nāšīma* ‘because we would bear the word with the libation’.

e. The perfect optative has, as its primary function, the expression of the past irrealis: Yt 8.24 *yeīdi zī mā ... yazaiiaṇta, ... auui maṇ auui.baβriiṇm dasanṇm aspanṇm aojō* ‘if they would have made a sacrifice to me ... I would have acquired the strength of ten horses’.

5. The **imperative** expresses orders and commands of an immediate character: Vd 2.4 *āaṭ mē gaēθā^ā frādaīia āaṭ mē gaēθā^ā varədaīia* ‘make my creatures prosper, make my creatures grow’.

§ 38 Clausal Syntax

1. In the Avestan manuscripts, no sign that serves as a marker of interrogation or exclamation appears. Nevertheless, *wh*-questions are usually introduced by an interrogative pronoun (cf. § 22.5) or adverb: OAv. *kadā*, YAv. *kaδa* ‘when?’; *kaθā* ‘how?’; OAv. *kū, kudā* ‘where?’; YAv. *kudaṭ* ‘from where?’; *kuθa* ‘how?’; *kuθrā* ‘where?’; *k(a)uuu* ‘where?’. Yes/no-questions are usually accompanied by specific particles, e.g., *kaṭ* (Skt. *kát*): Vd 6.42 *kaṭ tā haoma* ‘*yaoždaiiṇ anḥan* ‘should these haomas be purified?’

2. **Coordination.** Two or more constituents or clauses can be conjoined using the enclitic particle *-cā* (Gr. *-τε*, Lat. *-que*) or the word *uta*: Y 57.3 *ahe raiia x^oarənanḥaca* ‘through his wealth and abundance’. The particle *vā* introduces disjunctive coordination: Y 46.10 *nā gənā vā* ‘man or woman’. The OAv. particle *aṭ, aṭcū*, YAv. *āaṭ*, introduces a proposition that contrasts with what was previously said, while *aθā* indicates a consequence of a previous statement. Av. *zī* (Skt. *hí*) expresses causality, Vd 5.36 *juuō zī ... spəṇtahe mainiūš dāmanṇm ḥṇm.raēθβaiieiti* ‘because (while it is) alive, it mingles with the creatures of the beneficent spirit’.

3. **Subordination.** Subordination is introduced by relative pronouns (§ 22.3) or by conjunctions.

a. In **explanatory** clauses, OAv. *hiiaṭ*, YAv. *yaṭ* (Skt. *yát*) or *yaθā* (Skt. *yáthā*) ‘that; because, since’ is normally used: Yt 5.34 *auuaṭ āiiaptəm dazdi mē ... yaṭ bauuāni aiβi.vaniū^ā aṣīm dahākēm* ‘do me this favor ... that I may be victor over Aži Dahāka’.—**Final** or **consecutive** clauses also begin with *hiiaṭ/yaṭ* or *yaθa* ‘in order that; that, so that’: Vd 3.32 *yaṭ yauuō pouruš bauuāṭ aḍa maṭhrəm taḍa mairiū^ā* ‘in order that the grain be plentiful, this mantra should now be recited’.

b. Concessive clauses are served by *yaṭciṭ* ‘although’ (Skt. *yác cid*): Yt 10.85 *yeyjhe vāxš ... vī hapta karšuuqñ jasaiti yaṭciṭ nəmaṃha vācim baraiti* ‘whose voice ... spreads throughout the seven karšvars, although he raises his voice with reverence.’—**Comparative** clauses also begin with Av. *yaθā* ‘like, as’ (with correlatives *aθā*, *auuaθa*, etc.): Vd 2.32 *āaṭ yimō auuaθa kərənaoṭ yaθa dim išaṭ ahurō mazdā* ‘then Yima did just as AM. commanded him’.

c. The formation of **conditional** clauses depends on the type of statement. The usual conjunction is *yezi*, but *hūiaṭ/yaṭ*, *yaθā* also appears. When dealing with a necessary relation (reality), the protasis usually occurs in the indicative and the apodosis in any mood other than the optative: Vd 18.76 *yezi azāite təm ahūm paiθiāite yim ašaonqəm* ‘if he receives [the penance], then he will arrive to the existence of the followers of Aša’; *yēidi zī huuarə nōiṭ uzuxšūieiti* ‘if the sun does not rise’. An irrealis relationship is expressed using the conjunction *ye(i)di (zī)* ‘if’ (Skt. *yádi*) with the perfect optative (§ 37.4.e): Yt 8.52 *yēidi zī azəm nōiṭ daiḍiiqəm aom stārəm ... pairika aṃhuuqəm auuahisiḍiūiṭ* ‘if I had not created that star, the Pairika would have entered into existence.’ A contingent relation is established through use of the optative in both the protasis and apodosis.

d. For **local** subordinate clauses, *yaθrā* (Skt. *yátra*) ‘where’, and again *yaθa*, are used: Y 10.4 *staomi zəmō yaθa raodahe hubaoiḍiš* ‘I praise the earth where you grow fragrant’.—**Temporal** clauses are introduced with *hūiaṭ/yaṭ* or OAv. *yadā* (Skt. *yadā*). Other temporal conjunctions with more or less specific meanings also exist: *yezi* ‘as soon as’: Yt 19.43 *yezi bauuāni pərənāiiu zqəm caxrəm kərə-nauuāne* ‘as soon as I become older, I will make the earth my wheel’; and also constructions such as *para ahmāṭ yaṭ* ‘before’, *vīspəm ā ahmāṭ yaṭ* ‘until’ and ‘while’, *yauuatā* ‘until, while’, *āaṭ yaṭ* or *yauuat* (Skt. *yávat* ‘since’), *pasca yaṭ* ‘after’: Vd 16.8 *yezi nāirika vohuniš aiβi.vaēnāṭ yaṭ hē θrāiiō xšafna sacāṇte ... hē nišhiḍaēta vīspəm ā ahmaṭ yaṭ hē caθβārō xšafna sacāṇte* ‘if a woman notices blood when three nights have passed ... she should lie down until four nights pass’.

§ 39 Negation

1. The basic negative particle is *nōiṭ* ‘not; neither, nor’: Yt 15.16 *yimahe xšaθre nōiṭ aotəm āṃha nōiṭ garəməm* ‘during the reign of Yima, there was neither cold nor heat’. A repeated negation can be carried out with the OAv. particle *naēdā*, YAv. *naēda*: Y 11.6 *nōiṭ ahmi nmāne zānaite āθrauua naēda raθaēštā naēda vāstriiō fšuiiqs* ‘in this house will be born neither a priest nor a charioteer nor a cattle-herding farmer’.

The forms *nōiṭ* and *naēda* are built from the IE negative particle **nei*, which is attested in OP *naiy*, Lat. *nī*, OCS *ni-*. In Avestan, this particle is preserved in the first syllable of the indefinite pronoun *naēciš* ‘no one, nothing’: Y 43.6 *yōm naēciš dābahiiti* ‘whom no one deceives’, Yt 1.6 *yaṭ maṣm naēciš tauruuaiiāt* ‘that no one defeat me’.

2. The particle *mā* (= Skt. *mā́*, Gr. *μή*) negates a command (with the imperative or the injunctive) or a desire (with the optative; equivalent to *nōiṭ*). In Av., an inhibitive sense predominates:¹ Yt 17.60 *mā auui asmanəm frašusa* ‘do not move towards heaven’, H 2.17 *mā dim pārəsō yim pārəsahi* ‘stop questioning him whom you question’, Vd. 6.2 *māca təm zəm kāraiiən mā āpō hərəzaiiən* ‘and do not let them sow this land, let them not run water (through it)’; Y 31.17 *mā auuiduuā aipī.dābauuuiiāt* ‘that the ignorant one ceases to lie’.

3. To negate a noun or an adjective, the privative prefix *a/an/ana-* is frequently used; its functions are similar to the prefixes *un-* (inherited Germanic), *in-* (borrowed from Latin and Romance languages), and *a-/an-* (borrowed from Greek) in English. The origin of all three lies in the IE privative **n-*, which is attested in Gothic *un-*, Latin *in-*, Gr. *α-/αν-*, etc. Just as in Greek, Ilr. shows two variants, **aC-* (preconsonantal) and **anV-* (prevocalic): Av. *aməša-*, Skt. *amṛta-* ‘immortal’ from **ṇ-mṛ-ta-*, Av. *an-aša-* ‘unmilled’ from **n-arta-*. This prefix was still productive in Young Avestan. Any participle could be negated using this prefix: *anauuaṣṣhabdəmna-* ‘who does not remain asleep’ (pres.part.mid. of *auua-xʷabda-*), *afrataṭkuuah-* ‘which does not flow’ (perf.part. *fra-ta-tk-*).

§ 40 The System Changes

Not all Young Av. texts represent the same phase of the language. Indeed, they were composed in a living language, subject to the same processes of change as any other language. Some examples that illustrate how the system has undergone simplification have already been pointed out above (cf., e.g., the diffusion of the ablative *-t* under § 19.1.6). Other innovations include the following:

1. For purely formal reasons, feminine *ā*-stems come to follow the inflection of neuters in *-ah*, on account of the coincidence of *-ā* as the ending of the nom.acc.pl. in both inflectional types: YAv. *haēnā-* ‘army’ is twice found

¹ Recall that prohibition is done in Skt. with the particle *mā́* and the aorist injunctive: *mā́ no rūṣiṣah* ‘do not let us suffer harm’. Cf. further Gr. *μή ποιεῖ τοῦτο* ‘do not do that!’ versus *μή ποιήσης τοῦτο* ‘refrain from doing that!’.

inflected as a neuter, cf. Y 57.25 *pairi druuaṭbiiō haēnābiiō*, where the form *druuaṭbiiō* leaves no doubt as to the neuter gender of *haēnābiiō*.

The neut. noun *vqθβa-* ‘herd’ (from **van* ‘win’) attests an inflection in *-ā* in late texts. This inflection is probably due to the fact that *vqθβa-* is primarily used as a collective (‘the herds’ → ‘the livestock’), whose nom.acc.pl. *vqθβa* is formally identical to the nom.sg. of an *ā*-stem.

The acc.pl. *paθā* to *paṅt-/paθ-* ‘path’, instead of the original *paθō* (cf. ch. 3, fn. 2), supplies another example. The substitution in this case probably proceeds from the acc.sg. *paṅtqm*, which was interpreted as the acc.sg. of a fem. in *-ā*. In turn, the ending of the acc.pl.f. *-ā* was, by extension, applied to the weak stem *paθ-*, from which *paθā* arose.

2. A further semantic motivation has promoted the development of the m. stem *raθaēštā-* ‘driver, charioteer’ (Skt. *ratheṣṭhā-*) into a nomen agentis *raθaēštar-*. Since the nom.sg. of the root noun and of the nomina agentis (e.g. *dātā* ‘giver’) had an identical ending, the necessary formal condition was available for a change of inflectional type, and was sustained by semantic affinity: acc. *raθaēštārəm*, nom.pl. *raθaēštārō*; later, with thematicization: gen.sg. *raθaēštārahe*, acc.pl. *raθaēštārēsca*.

A semantic reason for morphological change is also evident from the tendency, found in late texts, not to decline numerals: Vd 14.91 *maṭ θrisqs aiiō.ayrāiš* ‘with thirty metal spikes’, Vd 4.11 *tīrō sata upāzananqm* ‘three hundred blows’. These cases follow the model of the majority of the numerals (§ 21.1), which were always indeclinable.

Texts

§ 41 Introduction

The Avestan texts, which have been transmitted only in manuscript form, are traditionally divided into several books, which constitute a single canon for the believers who preserved the recited text. Each book is usually subdivided into chapters. The most extensive book is the *Yasna* ('Liturgical Prayer'), which is in turn divided into 72 chapters or *hāitis*; the book principally contains texts for the yasna liturgy, i.e., prayers and mantras that were recited during the celebration of the religious ceremony. In the middle of the *Yasna* lie the *gāthās* ('Gathas, songs') of Zarathustra and the *Yasna haptanhāiti* ('the Yasna of Seven Chapters'), the only texts in Old Avestan.

Other purely ritual books include collections of lesser scope, such as the *Vīsperad* ('All of the Ratus', 24 chapters), the *Nyāyīšn* ('Elegy', 5 chapters), the *Gāh* ('Parts of the Day', 5 chapters), the *Srōza* ('The 30 Days', 2 chapters), and the *Āfrīngān* ('Thanks', 4 chapters). The *Yašt* ('Hymns', 21 chapters) are each dedicated to an Avestan deity and are, in large part, written in poetic form, with verses of eight syllables. Their content is mythological, at times encomiastic, and thus allows us to see into the background in which Mazdayasnanism came into being.

The *Vīdēvdād* ('The Anti-Demon Law', 22 chapters) narrates the origin of the world and of humanity. Later, the book turns to the enumeration of religious rules and laws that a believer must observe in order to be a good Mazdayasnanian. The book is composed in prose with some small poetic remnants.

Some relatively minor fragments, such as the *Nirangestān* ('Cultic Prescriptions'), the *Pursišnihā* ('Questions'), the *Hādōxt Nask* ('Book of Scriptures'), and the *Frahang ī oīm* (an Avestan-Pahlavi dictionary), also exist, but they have passed through a transmission even more deficient than the rest of the texts.

§ 41.1 *Young Avestan Texts*

A. *Yašt* 8 relates the battle between the star *Tištria* and the demon *Apaoša*. *Tištria* is the star *Sirius*, which announced the arrival of the rainy season.

- Yt 8.13 paoiriā^ā dasa xšapanō | spitama
zaraθuštra | tištriiō raēuuā^ā
x^varənaŋ^vhā^ā | kəhrpəm raēθβaiieiti |
raoxšnušua vazəmnō | narš
kəhrpa paŋca.dasaŋhō | xšāētahe
spiti.dōiθrahe | bərazatō auui.amahe
| amauuatō hunairiiāŋcō
- 8.14 taða aiiōš yaθa paoirīm | vīrəm
auui.yā^ā bauuaiti | taða aiiāoš yaθa
paoirīm | vīrəm auui.amō aēiti | taða
aiiāoš yaθa paoirīm | vīrəm ərazušqam
adaste
- 8.15 hō iθra viiāxmaniiete | hō iθra
pərəsaniieiti | kō maqam nūrəm
frāiiāzāite | gaomauuaitibiiō
haomauuaitibiiō zaoθrābiiō |
kahmāi azəm daðam | vīriiām ištīm
vīriiām vəθβam | hauuaheca urunō
yaoždāθrəm | nūrəm ahmi yesniiasca
| vahmiiasca aŋ^vhe astuuaitē | ašāt
haca yaṭ vahištāt
- 8.16 bitiiā^ā dasa xšapanō | spitama
zaraθuštra | tištriiō raēuuā^ā
x^varənaŋ^vhā^ā | kəhrpəm raēθβaiieiti |
raoxšnušua vazəmnō | gēuš kəhrpa
zaraniiō.sruuahe
- 8.17 hō iθra viiāxmaniiete | hō iθra
pərəsaniieiti | kō maqam nūrəm
frāiiāzāite | gaomauuaitibiiō
haomauuaitibiiō zaoθrābiiō |
kahmāi azəm daðam | vīriiām ištīm
vīriiām vəθβam | hauuaheca urunō
yaoždāθrəm | nūrəm ahmi yesniiasca
| vahmiiasca aŋ^vhe astuuaitē | ašāt
haca yaṭ vahištāt

The first ten nights, o Spitama
Zarathustra, splendid, beautiful
Tištria mixes his body flying among
the lights in the form of a fifteen
year-old man, radiant, with white
eyes, tall, very strong, vigorous,
dextrous.

He is then of the age when the girdle
first comes onto a young man. He is
then of the age when strength first
comes into a young man. He is then
of the age when a young man is given
to puberty.

He now proclaims, he now asks:
“Who will now honor me with
libations of milk and haoma? To
whom will I give wealth in men, a
flock of men, purification of his own
sprit? Now I am to be worshipped
and to be praised for the bony life
according to the best truth.”

The second ten nights, o Spitama
Zarathustra, splendid, beautiful
Tištria mixes his body flying among
the lights in the form of a bull having
golden horns.

He now proclaims, he now asks:
“Who will now honor me with
libations of milk and haoma? To
whom will I give wealth in men, a
flock of men, purification of his own
sprit? Now I am to be worshipped
and to be praised for the bony life
according to the best truth.”

- 8.18 θριτῖᾶ dasa xšapanō | spitama
zaraθuštra | tištriiō raēuuā
xʷarənaŋʰā | kəhrpəm raēθβaiieiti
| raoxšnušuuva vazəmnō | aspahē
kəhrpa aurušahe | srīrahe
zairi.gaošahe | zaraniio.aiβiđānahe
- 8.19 hō iθra viiāxmaniiete | hō iθra
pərəsaniieiti | kō maŋm nūrām
frāiiazāite | gaomauuaitibiio
haomauuaitibiio zaoθrābiio |
kahmāi azəmə dađām | vīriiam ištīm
vīriiam vəθβām | hauuaheca urunō
yaoždāθrəm | nūrām ahmi yesniasca
| vahmiasca aŋʰhe astuuaitē | ašāt
haca yaṭ vahištāt
- 8.20 āaṭ paiti auuāiti | spitama zaraθuštra
| tištriiō raēuuā xʷarənaŋʰā | auui
zraiiō vourukašəm | aspahē kəhrpa
aurušahe | srīrahe zairi.gaošahe |
zaraniio.aiβiđānahe
- 8.21 ā dim paiti.yaš nižduaraiti | daēuuō
yō apaošō | aspahē kəhrpa sāmahe |
kauruuahē kauruuō.gaošahe
| kauruuahē kauruuō.barəšahe |
kauruuahē kauruuō.dūmahe | dayahē
aiβiđātō.tarštōiš
- 8.22 haŋm tāciṭ bāzuš baratō | spitama
zaraθuštra | tištriiasca raēuuā
xʷarənaŋʰā | daēuuasca yō apaošō |
tā yūidiiaθō spitama zaraθuštra
| θri.aiiarəm θri.xšaparəm | ā
dim bauuaiti aiβi.aojā | ā dim
bauuaiti aiβi.vaniiā | daēuuō yō
apaošō | tištīm raēuuantəm
xʷarənaŋʰəntəm
- The third ten nights, o Spitama
Zarathustra, splendid, beautiful
Tištria mixes his body flying among
the lights in the form of a white
horse, lovely, having yellow ears,
having a golden bridle.
He now proclaims, he now asks:
“Who will now honor me with
libations of milk and haoma? To
whom will I give wealth in men, a
flock of men, purification of his own
sprit? Now I am to be worshipped
and to be praised for the bony life
according to the best truth.”
- Then he descends, o Spitama
Zarathustra, splendid, beautiful
Tištria, towards the lake Vourukaša,
in the form of a white horse, lovely,
having yellow ears, having a golden
bridle.
- The demon Apaoša runs against him
in pursuit, in the form of a black
horse, hairless with hairless ears,
hairless with a hairless back,
hairless with a hairless tail, reddish,
frighteningly harnessed.
- The two intermingle their legs, o
Spitama Zarathustra, splendid,
beautiful Tištria and Apaoša the
demon. They fight, o Spitama
Zarathustra, for three days and three
nights. He becomes overwhelming
in might, he becomes victorious,
Apaoša the demon over splendid,
beautiful Tištria.

- 8.23 apa dim aḏāt̄ viieiti | zraiaṅhaṭ̄ haca
 vourukaṣāt̄ | hāθrō.masar̄həm
 aḏβanəm | sādrəm uruuištrəmca
 nimrūite | tištriiō raēuuā xʷarənar̄hā
 | sādrəm mē ahura mazda |
 uruuištrəm āpō uruuarāasca | baxtəm
 daēne māzdaiiesne | nōiṭ̄ maṃ
 nūr̄aṃ maṣiiāka aoxtō.nāmana yasna
 yazəṅte | yaθa anie yazatāṅhō |
 aoxtō.nāmana yasna yaziṅti
- 8.24 yeidi zī mā maṣiiāka | aoxtō.nāmana
 yasna yazaiianta | yaθa anie
 yazatāṅhō | aoxtō.nāmana yasna
 yazinti | auui maṃ auui baβriiṃ |
 dasanṃ aspanṃ aojō | dasanṃ
 uštranṃ aojō | dasanṃ gauuṃ
 aojō | dasanṃ gairinṃ aojō |
 dasanṃ ar̄aṃ nāuuaiianṃ aojō
- 8.25 azəm yō ahurō mazdā | tištrīm
 raēuuar̄təm xʷarənar̄han̄təm |
 aoxtō.nāmana yasna yaze | auui dim
 auui.barāmi | dasanṃ aspanṃ aojō |
 dasanṃ uštranṃ aojō | dasanṃ
 gauuṃ aojō | dasanṃ gairinṃ
 aojō | dasanṃ ar̄aṃ nāuuaiianṃ
 aojō
- Yt 8.26 and 8.27 = Yt 8.20 and 8.21, respectively.
- 8.28 haṃ tāciṭ̄ bāzuš baratō | spitama
 zaraθuštra | tištriasca raēuuā
 xʷarənar̄hā | daēuuasca yō apaošō |
 tā yūidiiaθō spitama zaraθuštra
 | ā rapiθβinəm zrūuānəm | ā
 dim bauuaiti aiβi.aojā | ā dim
 bauuaiti aiβi.vaniiā | tištriiō raēuuā
 xʷarənar̄hā | daēūm yim apaošəm
- He chases him away from there, from the lake Vourukaša, for the distance of a *hāθra* in length. “Defeat and retreat!” utters splendid, beautiful Tištria. “Defeat to me, o Ahura Mazda, retreat, o waters and plants, disgrace, o Mazdayasnian religion! Men do not now worship me with an invocatory sacrifice, as the other gods are worshiped with an invocatory sacrifice.”
- “For if men had worshiped me with an invocatory sacrifice as the other gods are worshiped with an invocatory sacrifice, then I would have obtained the might of ten horses, the might of ten camels, the might of ten bulls, the might of ten mountains, the might of ten abundant waters.”
- I, Ahura Mazdā, worship splendid, beautiful Tištria with an invocatory sacrifice. To him I bring the might of ten horses, the might of ten camels, the might of ten bulls, the might of ten mountains, the might of ten abundant waters.
- The two intermingle their legs, o Spitama Zarathustra, splendid, beautiful Tištria and Apaoša the demon. They fight, o Spitama Zarathustra, until midday. To him great might comes, to him comes victory, splendid, beautiful Tištria over Apaoša the demon.

- 8.29 apa dim aḍāt viieiti | zraiaṅhaṭ haca He chases him away from there,
 vourukaṣāt | hāθrō.masarjəṃ from the lake Vourukaṣa, for the
 aḍβanəṃ | uṣtatātəṃ nimrauuaiṭe distance of a *hāθra* in length. “Good
 | tištriō raēuuā x^varənaṅ^vhā | fortune!” utters splendid, beautiful
 ušta mē ahura mazda | ušta āpō Tištria. “Good fortune to me, Ahura
 uruuarāscā | ušta daēne māzdaiiesne Mazda, good fortune, o waters and
 | ušta ā bauuāt daṅhauuō | us plants, good fortune, o Mazdayasnian
 vō arəṃ aḍauuō | apaiti.ərətā religion! There will be good fortune, o
 jasāṅti | aš.dānunəṃca yauuanəṃ | countries! Your water canals will
 kasu.dānunəṃca vāṣtranəṃ | run over unimpeded, (those) of the
 gaēθanəṃca astuuaitinəṃ wheat of plump grain, (those) of the
 meadows of fine grain, and (those) of
 the bony creatures.”

B. One of the most important animals in the Avesta is the dog. Chapter 13 of the *Vidēvdād* enumerates the prescriptions that believers must observe regarding the animal.

Vd 13.12 *dātarə gaēθanəṃ astuuaitinəṃ aṣāum* yō spānəṃ jaiṅti yim pasuš.haurum frazābaoḍarjəṃ snaθəṃ vīkərət.uštānəṃ: kā hē asti ciθa. āaṭ mraoṭ ahurō mazdā: ašta sata upāzananəṃ upāzōiṭ aspahē aštraiaia ašta sata sraošō.caranaiaia

Creator of the bony world, true one, he who strikes a blow on a shepherd dog which takes away (its) consciousness, which cuts away (its) life: with what is he punished? Thus spoke Ahura Mazdā: 800 lashes with the whip, 800 with the scourge, will be imposed on him.

13.13 *dātarə etc.* yō spānəṃ jaiṅti yim viš.haurum frazābaoḍarjəṃ snaθəṃ vīkərət.uštānəṃ: kā hē asti ciθa. āaṭ mraoṭ ahurō mazdā: hapta sata upāzananəṃ upāzōiṭ aspahē aštraiaia ašta hapta sraošō.caranaiaia

Creator of the bony world, true one, he who strikes a blow on a guard dog which takes away (its) consciousness, which cuts away (its) life: with what is he punished? Thus spoke Ahura Mazdā: 700 lashes with the whip, 700 with the scourge, will be imposed on him.

13.14 *dātarə etc.* yō spānəṃ jaiṅti yim vohunazgəṃ frazābaoḍarjəṃ snaθəṃ vīkərət.uštānəṃ: kā hē asti ciθa. āaṭ mraoṭ ahurō mazdā: xšuuāš sata *etc.*

Creator of the bony world, true one, he who strikes a blow on a hunting dog which takes away (its) consciousness, which cuts away (its) life: with

what is he punished? Thus spoke Ahura Mazdā: 600 lashes with the whip, 600 with the scourge, will be imposed on him.

13.15 *dātarə etc.* yō spānəm jaiṅti yim taurunəm frazābaoδaṅhəm snaθəm vīkərət.uštānəm: kā hē asti ciθa. āaṭ mraoṭ ahurō mazdā: paṅca sata *etc.*

Creator of the bony world, true one, he who strikes a blow on a young dog which takes away (its) consciousness, which cuts away (its) life: with what is he punished? Thus spoke Ahura Mazdā: 500 lashes with the whip, 500 with the scourge, will be imposed on him.

13.16 hāu jažaoš hāu vīzaoš hā sukuruṅahe hāu ^xurupōiš tiži.dātahe hāu ^xraopōiš ^xyaonō.x^vaptahe hāu vīspanəm spəṅtō.mainiiuuanaṅm spacīθraṅm anīia udra upāpa

This (is the punishment for the death) of a hedgehog, this (...) of a *vīzu*, this (...) of a porcupine, this (...) of a weasel having sharp teeth, this (...) of a fox asleep in its den, this (...) of all the canines of the beneficent spirit, other than the aquatic otter.¹

13.17 *dātarə etc.* kuua asti spā pasuš.hauruuō dāitiiō.gātuš. āaṭ mraoṭ ahurō mazdā: yō yūjiiastīm haca gaēθābiiō parāiti sraošəmnō tāiīuš vəhrkəmca

Creator *etc.*, where is it that the shepherd dog is in its proper place? Thus spoke Ahura Mazdā: (with him) who goes a *yūjiiasti* in length from the herds, listening for thieves and the wolf.

13.18 *dātarə etc.* kuua asti spā viš.hauruuō dāitiiō.gātuš. āaṭ mraoṭ ahurō mazdā: yō hāθrō.masəṅhəm aδβanəm haca vīzibiiō parāiti sraošəmnō tāiīuš vəhrkəmca

Creator *etc.*, where is it that the guard dog is in its proper place? Thus spoke Ahura Mazdā: (with him) who goes the distance of a *hāθra* in length from the settlement, listening for thieves and the wolf.

13.19 *dātarə etc.* kuua asti spā vohunazgō dāitiiō.gātuš. āaṭ mraoṭ ahurō mazdā: yō naēcim isaiti hunaraṅm tanuiie isaite θrāθrəm

Creator *etc.*, where is it that the hunting dog is in its proper place? Thus spoke Ahura Mazdā: (with him) who seeks no skill, (but) requires protection for his body.

1 The punishment for the death of an otter is more severe, and is addressed in Vd 14.

13.20 *dātarə etc.* *yō spānəm tarō.piθβəm daste yim pasuš.haurum, cuuaṭ aētaēšəm šiiəoθnanəm āstāraieiti. āat mraoṭ ahurō mazdā: yaθa aētahmi aṅhūuō yaṭ astuuaiṅti fratəmō.nmānahe nmānō.paitim paiti tarō.piθβəm daiθiiāt, aθa āstriieiti.*

Creator *etc.*, he who leaves a shepherd dog without sufficient food, how much does he sin (on account of) these actions? Thus spoke Ahura Mazda: as if in this life, which is bony, the lord of a foremost house were left without sufficient food, he sins that much.

13.21 *dātarə etc.* *yō spānəm tarō.piθβəm daste yim višhaurum, cuuaṭ aētaēšəm šiiəoθnanəm āstāraieiti. āat mraoṭ ahurō mazdā: yaθa aētahmi aṅhūuō yaṭ astuuaiṅti maḍəmō.nmānahe nmānō.paitim paiti tarō.piθβəm daiθiiāt, aθa āstriieiti.*

Creator *etc.*, he who leaves a guard dog without sufficient food, how much does he sin (on account of) these actions? Thus spoke Ahura Mazda: as if in this life, which is bony, the lord of a middling house were left without sufficient food, he sins that much.

13.22 *dātarə etc.* *yō spānəm tarō.piθβəm daste yim vohunazgəm, cuuaṭ aētaēšəm šiiəoθnanəm āstāraieiti. āat mraoṭ ahurō mazdā: narəm bōiṭ iḍa ašauuanəm jasəṅtəm ahmiia nmāne maṭ auuabiiō daxštābiiō yaθa āθrauua paiti tarō.piθβəm daiθiiāt aθa āstriieiti*

Creator *etc.*, he who leaves a hunting dog without sufficient food, how much does he sin (on account of) these actions? Thus spoke Ahura Mazda: as if in this life, which is bony, no less than a truthful man who enters into his house with his appearance like a priest were left without sufficient food, he sins that much.

13.23 *dātarə etc.* *yō spānəm tarō.piθβəm daste yim taurunəm, cuuaṭ aētaēšəm šiiəoθnanəm āstāraieiti. āat mraoṭ ahurō mazdā: yaθa aētahmi aṅhūuō yaṭ astuuaiṅti apərənāiiūkəm dahmō.kərətəm šiiəoθnāuuarəzəm vərəziiāt šiiəoθnəm paiti tarō.piθβəm daiθiiāt aθa āstriieiti*

Creator *etc.*, he who leaves a young dog without sufficient food, how much does he sin (on account of) these actions? Thus spoke Ahura Mazda: as if in this life, which is bony, a working child, the offspring of a *dahma* who does work, were left without sufficient food, he sins that much.

(Vd 13.24–27 lays out the punishment for the offenses committed in Vd 13.20–23, as 200, 90, 70, and 50 lashes, respectively.)

13.28 aētəm zī aētahmi aṅhhuō yaṭ astuuaiṅti spitama zaraθuštra, spəṅ-
tahe mainiiēuš dāmanəm āsištəm zauruūānəm upāiti yaṭ spānō yōi
hištənte axʹarō upa xʹarəṅtəm parō spasānō əuuīṅdānō, parō xšuuisca
āzūitišca gēuš maṭ baratu xʹarəθanəm sūnahe, aēuua he dāitiō. piθβəm

Because in this life, which is bony, o Spitama Zarathustra, the fastest among the creatures of the beneficent spirit to go into old age, as regards dogs, are those which stand without eating alongside one who is eating, lying in wait without receiving anything. Bring milk and fat along with meat as the food of the dog. That is its proper food.

13.29 dātəṛ *etc.* yat ahmi nmāne yaṭ māzdaiiasnōiš spā auuacā vā bauuaṭ
aḍāitiō.xratuš, kuθa tē vərəziiṅ aēte yōi mazdaiiasna

Creator *etc.*, if in a house which is of a Mazdayasnian there is a mute dog [scil. a dog that bites], lacking proper judgement, how shall those Mazdayasnians act here?

13.30 āaṭ mraoṭ ahurō mazdā: auua hē baraiiən tāštəm dāuru upa taṃ
manaθrīm, stamanəm hē aḍāṭ niīzaiiən ašti.masō xraoṣṣduuahe biš
aētauuatō varəduuahe.

Thus spoke Ahura Mazdā: they shall place a cut piece of wood about its neck, they shall close shut its mouth with this, an *ašti* in length in case of a hard piece, twice of that in length in case of a soft piece.

13.31 aētahmāṭciṭ nidarəzaiiən, fra hīmcīṭ nidarəzaiiən yezi nōiṭ spā
auuacā vā aḍāitiō.xratuš pasūm vā narəm vā raēšaiiāṭ

They shall tie it [scil. the wood] on it [scil. the mouth], they shall secure him with it, so that the mute dog lacking proper judgment does not harm the livestock or a man.

§ 41.2 *The Yasna Haptanḥāiti*

In the middle of the Yasna (chapters 35 to 41) is found the only OAv. text in prose that we possess. Its liturgical style is marked by parallelism and repetition.

Y 37.1–3 iθā aṭ yazamaidē ahurəm mazdəm, yō gəmcā ašəmcā dāṭ, apascā
dāṭ uruuarāscā vaṅvḥiš, raocāscā dāṭ būmīmca vīspācā vohū | ahiiā
xšaθrācā mazēnācā hauuapaṅhāišca. tēm aṭ yasnanəm pauruuatātā yaza-
maidē, yōi gēuš hacā šiiēiṅtī | tēm aṭ āhūiriiā nāmēni mazdā.varā
*spəṅtō.tēmā yazamaidē. tēm ahmākāiš *azdəbišcā uštānāišcā yaza-
maidē. tēm ašāunəm frauuašiš narəmcā nāirinəmcā yazamaidē.

So now we worship Ahura Mazda, who created the cow and the truth, (who) created the waters and the good plants, (who) created the lights and the earth and all good things | through his control and greatness and skillfulness. We worship him with the excellence of the sacrifices that dwell alongside the cow. | We worship him with the Ahurian names, which Mazdā chooses, the most beneficent ones. We worship him with our bodies and lives. We worship him in the Fravašis of the truthful ones, of the men and of the women.

§ 41.3 *The Gathas (Gāθās)*

Chapters 28–34, 43–51, and 53 contain the Gathas, which are poetic texts in various meters making a total of 855 verses. As regards their content and language, the Gathas represent the oldest form of Avestan. Given that Zarathustra speaks in the first person in some poems, and on account of the special religious content of the texts, it is thought that the Gathas may have been composed by the prophet Zarathustra himself. Although such a claim is unverifiable, the value of the Gathas for Iranian religious history and for comparative linguistics is, on all points, inestimable. It should be kept in mind that the form of the verses, and the compact and metaphorical style employed therein, makes the Gathas almost always difficult to interpret.

In Yasna 43, Zarathustra tells his god Ahura Mazdā how he received his prophetic calling from the Beneficent Spirit. Each strophe contains five verses of 4 + 7 syllables.

- | | | |
|------|---|--|
| 43.5 | spəntəm aṭ θβā mazdā mōṅhī ahurā
hiiat θβā aṅhəuš zaθōi darəsəm
paouruuim hiiat dā śiiaoθanā
miždauuən yācā uxδā akəm akāi
vaṅ ^v hīm ašim vaṅhauuē θβā hunarā
dāmōiš uruuāēsē apēmē | I realized that you are beneficent, o
Ahura Mazdā, because I see you as
the first one in the generation of
existence, because you establish
deeds and words as having prizes:
bad for the bad, a good reward for the
good, through your skill, at the final
turn of creation. |
| 43.6 | yahmī spəntā θβā mainiiū uruuāēsē
jasō mazdā xšaθrā ahmī vohū
manaṅhā yehiii śiiaoθanāiš gaēθā
ašā frādəntē aēbiiū ratuš sənghaitī
ārmaitiš θβahiiā xratəuš yəm naēcīš
dābaieitī. | At the turn to which you come
through your beneficent spirit, o
Mazdā, by your power, I am with
good thought, through whose deeds
the creatures prosper along with
truth. Right-mindedness explains to
them the judgments of your thinking,
which no one can deceive. |

- 43.7 spəntəm aṭ θβā mazdā mēj̄hī ahurā |
 hiiat mā vohū pairī.jasaṭ manəjhā |
 pərəsaṭca mā ciš ahī kahiiā ahī | kaθā
 aiiarē daxšārā fərasaiiāi dīšā | aibī
 θβāhū gaēθāhū tanuśucā | I realized that you are beneficent, o
 AM, when he surrounds me with
 good thought and asks: “Who are
 you? Whose are you? Why, o daxšārā,
 would you submit some day to
 questioning regarding your creatures
 and yourself?”
- 43.8 aṭ hōi aojī zaraθuštrō paouruuīm |
 haiθiio duuaēšā hiiat isōiia
 drəguuaitē | aṭ ašāunē rafənō
 xiiēm aojōjhūuat | hiiat +ā +būštīš
 vasasə.xšaθrahiia diiā | yauuat ā θβā
 mazdā staomī ufiācā | I respond to him then, first (I am)
 Zarathustra. And that I being
 truthful, would seek hostilities
 against the liar. Thus I would be a
 mighty support to the truthful, if I
 might gain the adornments of the
 one who rules according to his own
 will, inasmuch as I praise and extol
 you, o M.
- 43.9 spəntəm aṭ θβā mazdā mēj̄hī ahurā |
 hiiat mā vohū pairī.jasaṭ manəjhā |
 ahiiā fərasəm kahmāi viiuiiue vaši
 | aṭ ā θβahmāi āθrē rātəm nəmanjhō |
 ašahiiā mā yauuat isāi mainiia | I realized that you are beneficent, o
 AM, when he surrounds me with
 good thought (and asks me): “For
 whom do you wish to examine the
 consultation of this?”—“For your fire,
 a gift of reverence, for the truth, I will
 understand as much as I can.”
- 43.10 aṭ tū mōi dāiš ašəm hiiat mā
 zaozomī | ārmaitī hacimnō it
 ārəm | pərəsācā nā yā tōi ēhmā
 parštā | parštēm zī θβā +yaθənā taṭ
 əmauuatəm | hiiat θβā xšaiias aēšəm
 diiāt əmauuantəm | Show me then the truth that I
 continue to call to myself—in the
 company of right-mindedness I have
 come for it—and ask us what has
 been asked to us by you, for what is
 asked by your strength is like that of
 the strong, if the ruling one may
 make you vigorous and strong
- 43.11 spəntəm aṭ θβā mazdā mēj̄hī
 ahurā | hiiat mā vohū pairī.jasaṭ
 manəjhā | hiiat xsmā uxđāiš didaṭhē
 paouruuīm | sādṛā mōi səs mašiiāēšū
 zarzdāitīš | taṭ vərəziieidiia hiiat
 mōi mraotā vahīštəm | I realized that you are beneficent, o
 AM, when he surrounds me with
 good thought. When I learn of the
 first thing through your [pl.] words,
 faith in mortals seems disappointing,
 in order to carry out that which you
 tell me is best.

- 43.12 hiiatcā mōi mraoš ašəm jasō
frāxšnənē | at tū mōi nōiṭ asruštā
pairiaoyžā | *uzərəidiiā parā hiiat
mōi ā.jimaṭ | sərəošō ašī mažā.raiiā
hacimnō | yā vī ašīš rānōibiiō sauuōi
[vī]dāiiat
- 43.13 spəntəm at θβā mazdā mēḡhī ahurā |
hiiat mā vohū pairī.jasat manajhā |
arəθā vōizdiiā kāmahiā tēm mōi
dātā | darəghiiā yaoš yəm vā naēcīš
dārəšt itē | vairiīā stōiš yā θβahmī
xšaθrōi vāci
- 43.14 hiiat nā friiāi *vaēdəmnō isuuā daidīṭ
| maibiiō mazdā tauuā rafənō
frāxšnənəm | hiiat θβā xšaθrā
ašat hacā fraštā | *uzərəidiiā azō
sarədanā səṅghahiiā | maṭ tāiš vīspāiš
yōi tōi maθrā marəntī
- 43.15 spəntəm at θβā mazdā mēḡhī ahurā |
hiiat mā vohū pairī.jasat manajhā |
daxšaṭ ušiiāi tušnāmaitis vahīštā
| nōiṭ nā pourūš drəguuatō xiiat
cixšnušō | at tōi vīspəṅg angrəṅg
ašaonō ādarē
- 43.16 at ahurā huuō mainiiūm zaraθuštrō |
vərəntē mazdā yastē ciščā spəništō |
astuuat ašəm xiiat uštānā aojōḡhuuat
| xvəṅg darəsōi xšaθrōi xiiat ārmaitiš |
ašīm šiiəθanāiš vohū daidīṭ
manajhā
- And when you tell me “you reach truth in your foresight,” then you do not impose on me things that can be disobeyed, so that I arise before obedience will come to me, accompanied by reward having great wealth, who will distribute rewards on both sides in abundance.
- I realized that you are beneficent, o AM, when he surrounds me with good thought, to achieve the aspirations of (my) desire, you give me that of a long life, which no one holds you [pl.] to go (through with), that of a desirable existence, which is said to be within your control.
- Because a man who receives it and has it available would give it to a friend, (give) me your forethoughtful support, o Wisdom. Because (this) is attained with your rule in the company of truth, in order that I rise up together with all those who memorize your mantras, to expel those who challenge your teaching.
- I realized that you are beneficent, o AM, when he surrounds me with good thought. A peaceful mind teaches one to say what is best; a man should not wish to satisfy the many liars. These ones say that all the wicked ones are truthful.
- O Ahura, this Zarathustra chooses the spirit, o Mazdā, whichever of yours is the most beneficial. May the bony truth be strong through its vitality. May right-mindedness in its reign be in the sight of the sun. Grant reward through actions by means of good thought.

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Glossary

In the following pages, we offer a glossary of the words contained in the texts of § 41. The numbers refer to the corresponding nominal or verbal class. Young Avestan forms are unmarked. In verbs, active voice is unmarked.

The alphabetical order followed is: a ā â ă ą ą ę ă ē ē o o i i u ū – k x ́ xʷ g (ǵ) y – c j – t θ d δ ʈ – p f b β – n ń ŋʷ n ń ŋ m ŋ – (ý) y v – r – s z š ś ž ž – h.

- a-/i-** dem.pron. 'this' 22.2.1: gen.sg.m. *ahiiā* (OAv.), dat.pl.m.n. *aēibiūō*, loc.sg.m.n. *ahmi*, *ahmīa*
- aēuua-** 'one' 21.1; 'this' 20.2
- aēta-** 'that there' 22.2.2: nom.sg.n. *aētəm*, abl.sg.m.n. *aētahmāt*, loc.sg.m.n. *aētahmi*, nom.du.n. *aēte*, gen.pl.m.n. *aētaēšqm*
- aētauuant-** 'as, so, so much' 18.3: gen.sg.n. *aētauuatō*
- aēša-** 'vigorous' 19.1/2: acc.sg.m. *aēšəm*
- aoxtō.nāman(a)-** 'invocatory' (lit. 'speaking the name') 18.4/19.1: inst.sg.m. *aoxtō.nāmana*
- aoj-** 'speak' 32.1: 1.sg.pres.mid.inj. *aojī* (OAv.)
- aojah-** n. 'might' 18.7: acc.sg. *aojō*
- aojōṅhuuat-** (OAv.) 'mighty, strong' 18.3: nom.sg.n. *aojōṅhuuat*
- aiiaoš-** → *aiiu-*
- aiiar-** n. 'day' 18.6: acc.sg. *aiiarō* (OAv.)
- aibī** prep. 'about, regarding' + loc. 23.3
- aibī.aojah-** 'overwhelming in might' 18.7: nom.sg.m. *aibī.aojā*
- aibīdātō.taršti-** 'frighteningly harnessed' 19.5: gen.sg.m. *aibīdātō.tarštōiš*
- aibī.vaniiah-** 'victorious' 18.7: nom.sg.m. *aibī.vaniā*
- auua** adv. 'towards'
- auua-** dem.pron. 'that there' 22.2.5: nom.sg.m. *huuō* (OAv.), nom.sg.f. *hāu*, inst.pl.f. *auuabiūō*
- auuacah-** 'mute' 18.7: nom.sg.m. *auuacā*
- auuāi-** 'descend': 3.sg.pres.ind. *auuāiti*
- auui** prep. + acc. 'towards' 23.3
- auui.ama-** 'very strong' 19.1: gen.sg.m. *auui.amahe*
- auui.bar-** 'bring': 1.sg.pres.ind. *auui.barāmi* 32.4, 1.sg.perf.opt. *auui.baβriiqm* 32.6
- auruša-** 'white' 19.1/2: gen.sg.m. *aurušahe*
- aka-** 'bad, wicked' 19.1/2: acc.sg.n. *akəm*, dat.sg.n. *akāi*
- axʷar(a)-** 'without eating': nom.pl.m. *axʷarō*
- aθa** 'so, thus' 37.2
- adaste** → *dā-*
- adāt** 'from there'
- ađāitiū.xratu-** 'without proper judgment' 19.5: nom.sg.m. *ađāitiū.xratuš*
- ađu-** f. 'canal' 19.5: nom.pl. *ađauuō*
- ađβan-** m. 'distance' 18.4: acc.sg. *ađβanəm*
- aṭ** (OAv.): 'so, then'
- apa** adv. 'away, dis-'
- apaoša-** m. 'Apaōša' 19.1: nom.sg. *apaošō*, acc.sg. *apaošəm*
- apaiti.ərəta-** 'unimpeded' 19.1/2: nom.pl.f. *apaiti.ərətā*
- apascā** → *āp-*
- apəm** → *āp-*
- apərənāiūka-** 'child, youth' 19.1/2: acc.sg.m. *apərənāiūkəm*
- apōma-** 'final' 19.1/2: loc.sg.m. *apōmē* (OAv.)
- aṅhuuō** → *ahu-*
- aṅhōuš** → *ahu-*
- aṅʷhe** → *ahu-*
- aniia-** 'other' 19.1/2, 20.2.: nom.pl.m. *aniia*, nom.pl.m. *aniie*
- aṅgra-** (OAv.) 'evil, wicked' 19.1/2: acc.pl.m. *aṅgrəṅg*
- ama-** m. 'strength' 19.1: nom.sg. *amō*
- amauuant-** 'vigorous' 18.3.: gen.sg.m. *amauuatō*
- ar-** 'come' 32.1: 1.sg.aor.inj. *ārəm* (OAv.)

- arəθa-** n. 'intent, aspiration' 19.1: acc.pl. *arəθā* (OAv.)
- ast-** n. 'bone' 18.1: inst.pl. *azdəbiš* (OAv.)
- asti** → *ah-*
- astuuant-** 'bony' 18.3: nom.sg.n. *astuuat*, dat.sg.m. *astuuaitē*, loc.sg.m. *astuuaiṅti*, gen.pl.f. *astuuaitinəm*
- aspa-** 'horse' 19.1: gen.sg. *aspahe*, gen.pl. *aspanəm*
- aspiia-** 'of a horse, pertaining to a horse' 19.1/2: acc.sg.f. *aspiuqəm*
- asrušta-** 'disobeyed' 19.1/2: acc.pl.n. *asruštā* (OAv.)
- aza-** 'drive, impel' 32.4: *azē* 32.1
- azəm** pers.pron. of the 1st pers.sg. 22.1: acc.sg. *məm*, acc.sg.encl. *mā*, gen.dat.sg.encl. *mē*, *mōi* (OAv.), dat.sg. *maibiūō* (OAv.)
- azdəbiš** → *ast-*
- ašta** 'eight' 21.1
- ašti.masah-** 'of an ašti in length' 18.7: acc.sg.n. *ašti.masō*
- aštrā-** f. 'whip' 19.2: inst.sg. *aštraia*
- aš.dānu-** 'having plump grain' 19.5: gen.pl.m. *aš.dānunəm*
- aša-** n. 'truth' 19.1: acc.sg. *ašəm*, gen.sg. *ašahiā* (OAv.), abl.sg. *ašāt*, inst.sg. *ašā*
- ašauuan-** 'truthful' 18.4.: voc.sg. *ašāum*, acc.sg.m. *ašauuanəm*, dat.sg.m. *ašāunē* (OAv.), acc.pl.m. *ašaonō*, gen.pl.m. *ašāunəm* (OAv.)
- aši-** 'reward' 19.5: acc.sg. *ašīm*, inst.sg. *ašī*, acc.pl. *ašīš*
- ah-** 'be' 32.1: 1.sg.pres.ind. *ahmi*, *ahmī* (OAv.), 2.sg. *ahī* (OAv.), 3.sg. *astī*, 1.sg.pres.opt. *xiiām* (OAv.), 3.sg. *xiiāt* (OAv.)
- ahiiā** → *a-/i-*
- ahu-** 'life, existence' 19.5: gen.sg. *aḥhāuš* (OAv.), dat.sg. *aḥhe*, loc.sg. *aḥhuō*
- ahura-** m. 'Ahura' 19.1: nom.sg. *ahurō*, voc.sg. *ahura*, *ahurā* (OAv.), acc.sg. *ahurəm*
- ahmāka-** 'our' 19.1: inst.pl.m. *ahmākāiš*
- ahmi** → *ah-; a-/i-*
- ahmiia** → *a-/i-*
- ahmi** → *ah-*
- ā** adv. 'against, until, towards, for' + acc. 23.9
- āat** 'so, then, but'
- āiiu-** n. 'age, life' 19.5: gen.sg. *yaos* (OAv.), *aiiaoš*
- ātar-** n. 'fire' 18.5: dat.sg. *āθrē* (OAv.)
- āθrauan-** m. 'priest' 18.4: nom.sg. *āθraua*
- ād-** 'say' 32.6: 3.pl.perf.ind. *ādarē* (OAv.)
- āt** (OAv.) 'then, so, for' 37.2
- āp-** f. 'water' 18.1: voc.pl. *āpō*, acc.pl. *apas-cā*, gen.pl. *apəm*
- ārəm** → *ar-*
- ārmaiti-** f. 'right-mindedness' 19.5: nom.sg. *ārmaitiš*, inst.sg. *ārmaitī* (OAv.)
- āsišta-** 'swiftest' 19.1/2: nom.sg.n. *āsištəm*
- ā-stāraia-** 'make oneself sinful' 32.4: 3.sg.pres.ind. *āstāraiaēiti*
- āstriia-** 'sin' 32.4: 3.sg.pres.ind. *āstriieiti*
- āzūiti** f. 'fat' 19.5: nom.sg. *āzūitiš-ca*
- āhūriia-** 'ahurian, pertaining to Ahura' 19.1/2: acc.pl.n. *āhūriiā* (OAv.)
- əuuinđan-** 'without receiving anything' 18.4: nom.pl.m. *əuuinđanō*
- ərəzuša-** f. 'puberty' 19.2: acc.sg. *ərəzušəm*
- əmauuant-** (OAv.) 'strong' 18.3: acc.sg.m. *əmauuantəm*, gen.pl.m. *əmauuatəm*
- əhmā** → *vaēm*
- i-/aii-** 'go' 32.1: 3.sg.pres.ind. *aēiti*, inf. *itē* (OAv.)
- itē** → *i-/aii-*
- iθā** (OAv.) 'thus, so'
- iθra** 'here, now'
- iða** 'here'
- isa-** 'seek' 32.4: 3.sg.pres.ind. *isaiti*, 3.sg.pres.mid.ind. *isaite*, 1.sg.pres.mid.opt. *isōiiā* (OAv.)
- is(a)-** 'be able' 32.1/4: 1.sg.pres.mid.subj. *isāi* (OAv.)
- isuan-** '(be/have) available' 18.4: nom.sg.m. *isuuā*
- iṭ** → *i-/h-*
- išti-** f. 'wealth' 19.5: acc.sg. *ištīm*
- i-/h-** encl.pers.pron. of the 3rd pers. 22.1.6: acc.sg.m.f. *dim*, acc.sg.f. *hīm*, acc.sg.n. *iṭ*, gen.dat.sg. *hē*, *hōi* (OAv.)
- uxða-** n. 'word' 19.1: acc.pl. *uxdā* (OAv.), inst.pl. *uxdāiš*
- udra-** m. 'otter' 19.1: nom.pl. *udra*

upa prep. 'around, (up) to' + acc. 23.10

upāi- = *upa* + *i-/aii-* 'approach, draw near to'
(+ acc.); 3.sg.pres.ind. *upāiti*

upāpa- 'aquatic' 19.1: nom.pl. *upāpa*

upāza- (= *upa* + *aza-*) 'impose' 32.4:
3.sg.pres.opt. *upāzōiṭ*

upāzana- n. 'lash' 19.1: gen.pl. *upāzananam*

ufiia- 'extol' 32.4.: 1.sg.pres.ind. *ufiū-cā*
(OAv.)

uruuaēsa- m. 'turn' 19.1: loc.sg. *uruuaēsē*
(OAv.)

uruuan- m. 'soul, spirit' 18.4: gen.sg. *urunō*

uruuarā- f. 'plant' 19.2: voc.pl. *uruuarās-ca*,
acc.pl. *uruuarās-cā* (OAv.)

uruuištra- n. 'retreat' 19.1: acc.sg. *uruuištrəm*

urupi- m. 'weasel' 19.5: gen.sg. *urupōiš*

urunō → *uruuan-*

us adv. 'outside, above'

uz-ar- 'raise, rise': mid.inf. 32.1 *uzarəidiūi*
(OAv.)

ušta- 'wish' 19.1: nom.pl. *ušta*

uštātāt- f. 'good fortune' 18.2: acc.sg. *uštātātəm*

uštāna- m./n. 'life, vitality' 19.1: inst.sg. *uštānā*
(OAv.), inst.pl. *uštānāiš*

uštra- m. 'camel' 19.1: gen.pl. *uštranam*

ušiiai → *vac-*

ka- 'who?' 22.5: nom.sg.m. *kō*, nom.sg.f. *kā*,
gen.sg. *kahiūā* (OAv.), dat.sg.m. *kahmāi*

kauruua- 'bald, hairless' 19.1/2: gen.sg.m.
kauruuahē

kauruuō.gaoša- 'having hairless ears' 19.1/2:
gen.sg.m. *kauruuō.gaošahe*

kauruuō.dūma- 'having a hairless tail' 19.1/2:
gen.sg.m. *kauruuō.dūmahe*

kauruuō.barāša- 'having a hairless back'
19.1/2: gen.sg.m. *kauruuō.barāshahe*

kaθā (OAv.) 'how, why?'

kasu.dānu- 'having fine grains' 19.5: gen.pl.n.
kasu.dānunam

kāma- m. 'desire' 19.1: gen.sg. *kāmahiiā* (OAv.)

kəhrp- f. 'body, form' 18.1: inst.sg. *kəhrpa*,
acc.sg. *kəhrpəm*

kuua 'where?'

kuθa 'how'

xraoždūua- 'hard' 19.1: gen.sg.n. *xraoždūuahe*

xratu- m. 'thought' 19.5: gen.sg. *xratūuš* (OAv.)

xšaθra- n. 'rule, reign, control' 19.1: inst.sg.
xšaθrā (OAv.), loc.sg. *xšaθrōi* (OAv.)

xšapan- f. 'night' 18.4: acc.pl. *xšapanō*

xšaiia- 'rule' 32.4: nom.sg.m. of pres.part.
xšaiiqs

xšuuuš 'six'

xšuuuid- m. 'milk' 18.1: nom.sg. *xšuuuis-ca*

xšmā → *yūžəm*

xiiāt → *ah-*

xiiēm → *ah-*

x^vara- 'eat' 32.4: acc.sg.m. of pres.part.
x^varəntəm

x^varəθa- n. 'food' 19.1: gen.pl. *x^varəθanam*

x^vəng- → *huuar-*

gairi- m. 'mountain' 19.5: gen.pl. *gairinam*

gaeθā- f. 'creature' 19.2: nom.pl. *gaeθā*, gen.pl.
gaeθanam, abl.pl. *gaeθābiūō*, loc.pl.
gaeθāhū (OAv.)

gaoiia- 'of a cow, pertaining to a cow' 19.1/2:
acc.sg.f. *gaoiiqəm*

gaomauuənt- 'with milk' 18.3: dat.abl.pl.f.
gaomauuaitibiūō

gauu- 'cow, bull; meat': acc.sg. *gqm*, gen.abl.sg.
gūuš, gen.pl. *gauuuqəm*

gam 'go, come' 32.1: 3.sg.aor.subj. *jimaṭ*
-ca, -cā (OAv.) encl. 'and'

cixšnuša- 'wish to satisfy' 25.17, 32.4:
nom.sg.m. of pres.part. *cixšnušō*

ciθā- f. 'punishment, penance' 19.2: nom.sg.
ciθa

-ciṭ, -ciṭ (OAv.) affirmative or emphatic
pariticle

ci-/ca- 'who?', 'someone' 22.5.1: nom.sg.m. *ciš*,
ciš-cā (OAv.)

cuuaṭ 'how much?'

jan-/yn- 'beat, strike' 32.1: 3.sg.pres.ind. *jaiṅti*

jaša- 'go, come' 25.16, 32.4: 2.sg.pres.inj.
jasō, 3.pl.pres.subj. *jasāṅti*, acc.sg.m. of
pres.part. *jasəntəm*

jažu- m. 'hedgehog' 19.5: gen.sg. *jažaoš*

jimaṭ → *gam-*

tauuā → *tūm*

tauruna- 'young' 19.1/2: acc.sg.m. *taurunəm*

taða 'so, then'

taṭ → *ha-/ta-*

tanū- m.f. 'body' 19.4: dat.sg. *tanuiie*, loc.pl. *tanušu-cā* (OAv.)

tarō.piθβa- 'lacking in food' 19.1/2: acc.sg.m. *tarō.piθβam*

tāciṭ → *ha-/ta-*

tāiiu- m. 'thief' 19.5: acc.pl. *tāiūš*

tāiš → *ha-/ta-*

tāšta- 'shaped, formed' 19.1/2: acc.sg.n. *tāštəm*

tā → *ha-/ta-*

taṃ → *ha-/ta-*

tām → *ha-/ta-*

tē → *tūm*; *ha-/ta-*

tōi → *tūm*; *ha-/ta-*

tištriia- m. 'Tištria' 19.1: nom.sg. *tištriias-ca*, *tištriūō*, acc.sg. *tištrīm*

tiži.dāta- 'having sharp teeth' 19.1/2: gen.sg.m. *tiži.dātahe*

tušna- 'peaceful' 19.1/2: nom.sg.f. *tušnā* (OAv.)

tū → *tūm*

tūm pers. pron. of the 2nd pers.sg. 'you' 22.1: nom.encl. *tū*, acc.encl. *θβā*, gen. *tauuā* (OAv.), gen.dat.encl. *tē*, *tōi* (OAv.)

θβa- possessive pron. 'your' 22.4: gen.sg.m. *θβahiiā* (OAv.), inst.sg.m.n. *θβā* (OAv.), loc.sg.m. *θβahmī* (OAv.), loc.pl.f. *θβāhū* (OAv.)

θβā → *tūm*

θrāθra- n. 'protection' 19.1: acc.sg. *θrāθrəm*

θri.aiiara- 'lasting three days' 19.1/2: acc.sg.n. *θri.aiiarəm*

θri.xšapara- 'lasting three nights' 19.1/2: acc.sg.n. *θri.xšaparəm*

θritiia- 'third' 19.1/2, 21.2: nom.pl.f. *θritiūā*

daēuua- m. 'demon' 19.1: nom.sg. *daēuuas-ca*, *daēuuō*, acc.sg. *daēūm*

daēnā- f. 'religion' 19.2: voc.sg. *daēne*

daiθiiāt → *dā-*

daidit → *dā-*

daxša- 'show' 32.4: 3.sg.pres.inj. *daxsaṭ*

daxšāra- m. 'daxšāra' (meaning unknown) 19.1: voc.sg. *daxšārā* (OAv.)

daxšta- n. 'characteristic' 19.1: dat.abl.pl. *daxštābiūō* (19.2)

daya- 'reddish' 19.1: gen.sg.m. *dayahe*

daḍaṃ → *dā-*

dajhu- f. 'country' 19.5: voc.pl. *dajhauuō*

dar- 'hold, support' 32.5: 3.sg.aor.inj. *dārəšt* (OAv.)

darəga- (OAv.) 'long' 19.1/2: gen.sg.n. *darəgahiā*

darəsa- m. 'appearance; sight' 19.1: loc.sg. *darəsōi* (OAv.)

dars- 'see, look' 32.1: 1.sg.aor.inj. *darəsəm*

dasa(-) 'ten' 21.1: indecl. *dasa*, gen.pl.m.f. *dasanəm*

daste → *dā-*

dahmō.kərəta- 'made by a dahma' 19.1/2: acc.sg.m. *dahmō.kərətəm*

dā 'give; put; make' 32.1/2: 1.sg.pres.inj. *dadəm*, 3.sg.pres.mid.inj. *daste*, *adaste*, 3.sg.pres.opt. *daiθiiāt*, *daidit* (OAv.), 2.sg.aor.inj. *dā*, 3.sg.aor.inj. *dāt* (OAv.), 2.pl.aor.inj. *dātā* (OAv.), 3.sg.aor.opt. *dāiūāt*, *diiāt* (OAv.), 1.sg.aor.mid.opt. *diiā* (OAv.), 2.sg.aor.mid.opt. *dīšā*

dāitiio.gātu- 'in the proper place' 19.5: nom.sg.m. *dāitiio.gātuš*

dāitiio.piθβa- n. 'proper food': nom.sg. *dāitiio.piθβam*

dāiš → *dis-*

dāuru- n. 'wood' 19.5: acc.sg. *dāuru*

dātar- m. 'creator' 18.5: voc.sg. *dātarə*

dābaiaia- 'deceive' 32.4: 3.sg.ind.pres. *dābaieiti* (OAv.)

dāman- n. 'creature' 18.4: gen.pl. *dāmanəm*

dāmi- f. 'creation' 19.5: gen.sg. *dāmōiš*

dārəšt → *dar-*

dah- 'teach' 32.2: 1.sg.pres.mid.ind. *dīdajhē* (OAv.)

diiā → *dā-*

diiāt → *dā-*

dim → *i-/h-*

dis 'point, show' 32.5: 2.sg.aor.inj. *dāiš* (OAv.)

dīdajhē → *dah-*

dīšā → *dā-*

duuaēšah- n. (OAv.) 'hostility' 18.7: acc.pl. *duuaēšā*

drəguuant- m. (OAv.) 'liar' 18.3: dat.sg. *drəguuaitē*, acc.pl. *drəguuatō*

- paoiriia-** 'first' 19.1/2, 21.2: acc.sg.n. *paoirīm*,
acc.pl.f. *paoiriūā*
- paouruiia-** (OAv.) 'first' 19.1/2: acc.sg.m.
paouruūim
- paiti** adv. 'to(wards)' 23.14
- paitiiañc-** 'against, opposed to' 18.2: nom.sg.m.
paiti.yqš
- pairiaoj-** (*pairi* + *aoj-*) 'impose' 32.1:
2.sg.pres.mid.inj. *pairiiaoyžā* (OAv.)
- pairī.jasa-** 'surround' 32.4: 3.sg.pres.inj.
pairī.jasaṭ
- pauruuatāt-** 'excellence' 18.2: inst.sg.
pauruuatātā (OAv.)
- pañca** 'five' 21.1
- pañca.dasah-** 'fifteen' 18.7: gen.sg.m.
pañca.dasayhō
- parā** adv. 'before' 23.16
- parāi** = *para* + *i-/aii-* 'go forward' 32.1:
3.sg.pres.ind. *parāiti*
- parō** adv. 'beside', 'further' 23.17
- paršta-** 'asked' 19.1: nom.sg.n. *parštām* (OAv.),
nom.pl.n. *parštā* (OAv.)
- pasu-** m. 'cattle, livestock' 19.5: acc.sg.
pasūm
- pasuš.hauruua-** 'shepherding' 19.1/2:
nom.sg.m. *pasuš.hauruuō*, acc.sg.m.
pasuš.haurum
- pərəsa-** 'ask' 32.4: 3.sg.pres.inj. *pərəsaṭ*,
2.sg.pres.impv. *pərəsā-cā*
- pərəsaniia-** 'ask' 32.4: 3.sg.pres.ind.
pərəsaniieiti
- fərasa-** m./n. (OAv.) 'consultation' 19.1: acc.sg.
fərasām
- fərasā-** (OAv.) f. 'question' 19.2: dat.sg.
fərasaiiāi
- frauuašī-** f. 'Fravašī' 19.5: acc.pl. *frauuašīš*
- fratəmnō.nmāna-** n. 'foremost house' 19.1:
gen.sg. *fratəmnō.nmānahe*
- frazābaoḍah-** 'taking away the consciousness'
18.7: acc.sg.m. *frazābaoḍaḥam*
- frā** adv. 'forth, forward' 23.19
- frāiiaza-** (*frā* + *yaza-*) 'honor' 32.4:
3.sg.pres.mid.subj. *frāiiazāite*
- frāxšnəna-** (OAv.) m./n. 'foresight' 19.1: loc.sg.
fraxšnaənē
- frāxšnəna-** (OAv.) 'foresightful one' 19.1:
acc.sg.n. *frāxšnənəm*
- frāda-** 'prosper' 32.4: 3.pl.pres.mid.ind.
frādəntē (OAv.)
- fraš-** 'attain' (*fra-* + *qs* → *nas-*) 32.1:
3.sg.aor.mid.inj.
- friia-** 'friend' 19.1/2: dat.sg.m. *friiāi*
- bauua-** 'be(come)' 32.4: 3.sg.pres.ind. *bauuaiti*,
3.sg.pres.inj. *bauuaṭ*, 3.sg.pres.subj. *bauuāt*
- baxta-** n. 'destiny; disgrace' 19.1: acc.sg. *baxtām*
- bara** 'bear, carry' 32.4: 3.sg.pres.impv. *baratu*,
3.du.pres.ind. *baratō*, 3.pl.pres.opt.
baraiian
- bāzu-** m. 'arm, leg' 19.5: acc.pl. *bāzuš*
- bərazant-** 'high' 18.3: gen.sg.m. *bərazatō*
- bōiṭ** 'nothing less than'
- bitiia-** 'second' 19.1/2, 21.1: acc.pl.f. *bitiūā*
- biš** 'twice'
- būmi-** f. 'earth' 19.5: acc.sg. *būmīm*
- būšti-** f. 'adornment' 19.5: acc.pl. *būštiš*
- naēci-/naēca-** 'no one' 22.5.1: nom.sg.m.
naēcīš, acc.sg.m. *naēcīm*
- nar-** m. 'man' 18.5: nom.sg. *nā*, acc.sg. *narəm*,
gen.sg. *narš*, gen.pl. *narqəm*
- nas-** 'reach'
- nāiri-** f. 'woman' 19.3: gen.pl. *nāirinqəm*
- nāuuaiia-** 'rich in waters' 19.1/2: gen.pl.
nāuuaiianqəm
- nāman-** n. 'name' 18.4: acc.pl. *nāmāni* (OAv.)
- nā** → *vaēm*
- nəmah-** n. 'reverance, homage' 18.7: gen.sg.
nəmahhō
- nōiṭ** 'not'
- niiaza-** (*ni* + *aza-*) 'close, tighten' 32.4:
3.pl.pres.opt. *niiazaiian*
- ni-darəza-** 'tie, bind; hold down' 32.4:
3.pl.pres.opt. *nidarəzaiian*
- ni-mrū-** 'utter' 32.1: 3.sg.pres.mid.ind.
nimrūite
- ni-mrauua-** 'utter' 32.4: 3.sg.pres.mid.ind.
nimrauuaite
- niž-duuara-** 'run/chase (out)': 3.sg.pres.ind.
nižduuaraiti
- nūrəqəm** 'now'
- nmāna-** n. 'house' 19.1: loc.sg. *nmāne*

- nmānō.paiti**- m. 'master of the house' 19.5:
acc.sg. *nmānō.paitīm*
- maiti**- f. 'mind' 19.5; nom.sg. *maitiš*
- maibiiō** → *azəm*
- maḍəmō.nmāna**- n. 'house of middling importance' 19.1; gen.sg. *maḍəmō.nmānahe*
- maṭ** prep./posp. + gen. 'with'
- man**- 'think, realize': 1.sg.aor.mid.inj. *məṅghī*
- manaοθrī**- f. 'neck' 19.3; acc.sg. *manaοθrīm*
- manah**- n. 'thought' 18.7; inst.sg. *manahā* (OAv.)
- mañiia**- 'be aware, think about' 32.4:
1.sg.pres.mid.subj. *mainiūāi*
- mañiiu**- 'spirit' 19.5; acc.sg. *mainiūm*, gen.sg. *mainiūuš*, inst.sg. *mainiū* (OAv.)
- mara**- 'memorize' 32.4; 3.pl.pres.ind. *marəntī* (OAv.)
- mazan**- n. 'greatness' 18.4; inst.sg. *mazənā-cā* (OAv.)
- mazdā**- m. 'Mazdā' 18.1; nom.sg. *mazdā*,
voc.sg. *mazda*, *mazdā* (OAv.), acc.sg. *mazdəm*
- mazdaiiasna**- 'Mazdayasnian' 19.1/2; nom.pl. *mazdaiiasna*
- mazdā.vara**- 'which Mazdā chooses' 19.1/2:
acc.pl.n. *mazdā.varā* (OAv.)
- mašīia**- m. 'mortal, man' 19.1; loc.pl. *mašīiaēsū*
- mašīiāka**- m. 'man' 19.1; nom.pl. *mašīiāka*
- mā** → *azəm*
- māzdaiiesni**- 'Mazdayasnian' 19.5; voc.sg.f. *māzdaiiesne*
- maṭra**- m. 'mantra' 19.1; acc.pl. (sic!) *maṭrā*
- maṃ** → *azəm*
- məṅghī** → *man*-
- mīzdauuənt**- 'having prizes' 18.3; acc.pl.n. *mīzdauuəṇ* (OAv.)
- mrauu-/mrū**- 'speak' 32.1; 2.sg.pres.inj. *mraoš*,
3.sg.pres.inj. *mraoṭ*, 2.pl.pres.inj. *mraotā* (OAv.)
- ya**- relative pron. 'which, who' 22.3; nom.sg.m. *yā* (OAv.), *yas-tē*, *yō*, acc.sg.m. *yām* (OAv.),
yim, gen.sg.n. *yehiā*, inst.sg.m. *yā*, loc.sg.m. *yahmī* (OAv.), nom.pl.m. *yōi*, nom.acc.pl.n. *yā(-cā)* (OAv.), nom.sg.f. *yā*
- yaonō.x^vapta**- 'sleeping in its den' 19.1/2:
gen.sg.m. *yaonō.x^vaptahe*
- yaoš** → *āiū*-
- yaoždāθra**- n. 'purification' 19.1; acc.sg. *yaoždāθrəm*
- yauua**- 'wheat' 19.1; gen.pl. *yauuanəṃ*
- yauuaṭ** 'as much as'
- yaθa** 'as, when' 37.3
- yaθəna**- m. 'strength, force' 19.1; inst.sg. *yaθənā*
- yasna**- m. 'sacrifice, act of worship' 19.1; inst.sg. *yasna*, gen.pl. *yasnanəṃ*
- yaza**- 'worship, honor' 32.4; 1.sg.pres.mid.ind. *yaze*, 1.pl.pres.mid.ind. *yazamaidē* (OAv.), 3.pl.pres.ind.mid. *yazənte*,
3.pl.pres.mid.opt. *yazaiianta*
- yaziia**- 'be worshiped' 32.4; 3.pl.pres.ind. *yazinti*
- yāh**- n. 'girdle' 18.1; nom.sg. *yā*
- yeiḍi** 'if' 37.3
- yesniia**- 'deserving of worship' 19.1/2:
nom.sg.m. *yesniias-ca*
- yezi** 'if' 37.3
- yūiḍiia**- 'fight' 32.4; 3.du.pres.ind. *yūiḍiiaθō*
- yūjiiasti**- f. 'yūjiiasti-' (a measure of distance):
acc.sg. *yūjiiastīm*
- yūžəm** pers.pron. of the 2nd pers.pl. 'you, you all' 22.1; acc.encl. *vā*, acc.gen.dat.encl. *vō*,
inst. *xsmā* (OAv.)
- vaēda**- 'find' 32.4; nom.sg.m. of pres.mid.part. *vaēdəmnō* (OAv.)
- vaēm** pers.pron. of the 1st pers.pl. 'we' 22.1; acc. *əhmā* (OAv.), acc.encl. *nā* (OAv.)
- vairiia**- 'to be chosen, desirable' 19.1/2:
gen.sg.f. *vairiūā*
- vac** 'speak, say' 32.1; 3.sg.aor.pass.inj. *vācī* (OAv.), inf. *ušūāi* (OAv.)
- vaṅhu**- 'good' 19.3,5; acc.sg.f. *vaṅ^vim*, dat.sg.n. *vaṅhauē* (OAv.), inst.sg.n. *vohū* (OAv.),
acc.pl.f. *vaṅ^vhiš*, acc.pl.n. *vohū* (OAv.)
- var** 'choose, want' 32.3; 3.sg.pres.mid.ind. *vəṛəntē* (OAv.)
- varəduua**- 'soft' 19.1; gen.sg.n. *varəduuahe*
- vas-/us**- 'wish, want' 32.1; 2.sg.pres.ind. *vašī* (OAv.)

- vasasə.xšaθra-** m. (OAv.) 'who rules according to his own will' 19.1: gen.sg. *vasasə.xšaθrahiia*
- vaza-** 'lead, drive' 32.4: nom.sg.m. of pres.mid.part. *vazəmnō*
- vahišta-** 'best' 19.1/2: acc.sg.n. *vahištəm*
- vahmiia-** 'deserving of praise' 19.1/2: nom.sg.m. *vahmiias-ca*
- vā** 'or' 37.2
- vācī** → *vac-*
- vāstra-** n. 'pasture, meadow' 19.1: gen.pl. *vāstranəm*
- vā** → *yūžəm*
- vəθβā-** f. 'herd': acc.sg. *vəθβəm*
- vərəntē** → *var-*
- vərəziia-** 'carry out, execute, do' 32.4: 3.sg.pres.subj. *vərəziiāt*, 3.pl.pres.subj. *vərəziiən*, mid.inf. *vərəziieidiiai* (OAv.)
- vəhrka-** m. 'wolf' 19.1: acc.sg. *vəhrkəm*
- vourukaša-** 'Vourukaša' (lit.: 'having a wide bay') 19.1/2: acc.sg.n. *vourukašəm*, abl.sg. *vourukašāt*
- vohū** → *vanhu-*
- vohunazga-** 'for hunting (of dogs)' 19.1/2: nom.sg.m. *vohunazgō*, acc.sg.m. *vohunazgəm*
- vō** → *yūžəm*
- vōizdiiai** → *vid-*
- viia-** 'pursue, chase' 32.4: 3.sg.pres.ind. *viieiti*
- viiāxmañiia-** 'proclaim, speak aloud' 32.4: 3.sg.pres.mid.ind. *viiāxmaniiete*
- vid-** 'find; know' 32.6: act.inf. *vi-uūduiē*, mid.inf. *vōizdiiai*
- viš.hauruu-** 'guardian' (lit.: 'protecting the village') 19.1/2: nom.sg.m. *viš.hauruuō*, acc.sg.m. *viš.haurum*
- vī** adv. 'apart'
- viuūduiē** → *vid-*
- vikəṛə.ūštāna-** 'which cuts away life' 19.1/2: acc.sg.m. *vikəṛə.ūštānəm*
- vīra-** m. 'man' 19.1: acc.sg. *vīrəm*
- virīia-** 'pertaining to men, manly' 19.1/2: acc.sg.f. *virīiqm*
- vis-** f. 'tribe, village' 18.1: abl.pl. *vižibiō*
- vīspa-** 'all' 19.1/2: acc.pl.m. *vīspāng* (OAv.), acc.pl.n. *vīspā-cā* (OAv.), gen.pl.m. *vīspanəm*, inst.pl.m. *vīspāiš*
- vīzu-** m. 'vīzu' (an animal) 19.5: gen.sg. *vīzaoš*
- vīžibiō** → *vis-*
- raēuuant-** 'brilliant, splendid' 18.3: nom.sg.m. *raēuuā*, acc.sg.m. *raēuuantəm*
- raēθβaiia-** 'mix' 32.4: 3.sg.pres.ind. *raēθβaiieiti*
- raēšaiia-** 'damage' 32.4: 3.sg.pres.subj. *raēšaiiāt*
- raoxšnu-** n.? 'light': loc.pl. *raoxšnušuu*
- raocah-** n. 'light' 18.7: acc.pl. *raocās-cā* (OAv.)
- raopi-** m. 'fox' 19.5: gen.sg. *raopōiš*
- ratu-** m. 'judgment' 18.5: acc.pl. *ratūš*
- rapiθβina-** 'pertaining to midday' 19.1/2: acc.sg.m. *rapiθβinəm*
- rafənah-** n. 'support' 18.7: nom.acc.sg. *rafənō*
- rātā-** f. 'gift' 19.2: acc.sg. *rātəm*
- rāna-** m. 'side, part' 19.1: dat.pl. *rānōibiō* (OAv.)
- sauuu-** n. 'abundance': loc.sg. *sauuōi* (OAv.)
- sata-** 'one hundred' 21.1: acc.pl.n. *sata*
- saṇd-** 'seem' 32.5: 3.sg.aor.inj. *saṣ* (OAv.)
- sarədanā-** f. 'challenge; challenger' 19.2: acc.pl. *sarədanā*
- sādra-** n. 'defeat' 19.1: acc.sg. *sādrəm*
- sādra-** 'deceptive' 19.1/2: nom.sg.f. *sādrā* (OAv.)
- sāma-** 'black' 19.1/2: gen.sg.m. *sāmahe*
- saṣ** → *saṇd-*
- səraoša-** m. (OAv.) 'obedience': nom.sg. *səraošō*
- səngha-** (OAv.) 'explain': 3.sg.pres.ind. *sənghaitī*
- səngha-** (OAv.) m. 'explanation': gen.sg. *sənghahiā*
- sukuruna-** m. 'porcupine' 19.1: gen.sg. *sukurunahe*
- sūnahe** → *span/sūn-*
- stauu-/stu-** 'praise' 32.1: 1.sg.pres.ind. *staomī* (OAv.)
- staman-** m. 'mouth' 18.4: *staməm*
- sti-** f. 'existence' 19.5: gen.sg. *stōiš*
- spaciθra-** 'canine' 19.1/2: gen.pl.m. *spaciθranəm*
- span-/sūn-** m. 'dog' 18.1/4: nom.sg. *spā*, acc.sg. *spānəm*, gen.sg. *sūnahe*, nom.pl. *spānō*

- spasan-** 'spying' 18.4: nom.pl.m. *spasānō*
- spənta-** 'beneficent' 19.1/2: acc.sg.m. *spəntəm*,
gen.sg.m. *spəntahe*, inst.sg.m. *spəntā* (OAv.)
- spəntō.təma-** 'most beneficent' 19.1/2:
acc.pl.n. *spəntō.təmə* (OAv.)
- spəntō.mainiiauuu-** 'pertaining to the
beneficent spirit' 19.1/2: gen.pl.m.
spəntō.mainiiauuuənəm
- spəništa-** (OAv.) 'most beneficent' 19.1/2:
nom.sg.m. *spəništō*
- spitamā-** m. 'Spitama' 19.1: voc.sg. *spitamā*
- spiti.dōiθra-** 'having white eyes' 19.1/2:
gen.sg.m. *spiti.dōiθrahe*
- snaθa-** m. 'blow, hit' 19.1: acc.sg. *snaθəm*
- sraoša-** 'pay attention': nom.sg.m. of pres.part.
sraošəmnō
- sraošō.caranā-** 'scourge' 19.2: inst.sg.
sraošō.caranaiia
- srīra-** 'beautiful' 19.1/2: gen.sg.m. *srīrahe*
- zaoθrā-** f. 'libation' 19.2: dat.abl.pl. *zaoθrābiū*
- zaozao-/zaozū-** 'call' 32.1 (present intensive
25.2b): 1.sg.pres.ind. *zaozaoimī* (OAv.)
- zairi.gaoša-** 'having yellow ears' 19.1/2:
gen.sg.m. *ziri.gaošahe*
- zauruuān-** m. 'old age' 18.4: acc.sg.
zauruuānəm
- zaraθuštra-** m. 'Zarathustra' 19.1: nom.sg.
zaraθuštrō, voc.sg. *zaraθuštra*
- zaraniūō.aiβiđāna-** 'having a golden bridle'
19.1/2: gen.sg.m. *zaraniūō.aiβiđānahe*
- zaraniūō.sruua-** 'having golden horns' 19.1/2:
gen.sg.m. *zaraniūō.sruuahe*
- zarazdāiti-** f. 'faith' 19.5: nom.sg. *zarazdāitiš*
- zəθa-** n. 'creation, generation' 19.1: loc.sg. *zəθōi*
(OAv.)
- zi** 'because'
- zraiiāh-** n. 'lake' 18.7: acc.sg. *zraiiō*, abl.sg.
zraiiāhəṭ
- zruuan-** m. 'time' 18.4: acc.sg. *zruuānəm*
- šiiāē-/šii-** 'dwell' 32.1: 3.pl.pres.ind. *šiiēintī*
(OAv.)
- šiiāoθana-** n. 'deed, act' 19.1: acc.pl. *šiiāoθanā*,
inst.pl. *šiiāoθanāiš*
- šiiāoθna-** n. 'deed, act' 19.1: acc.sg. *šiiāoθnəm*,
gen.pl. *šiiāoθnanəm*
- šiiāoθnāuuarəz-** 'doing deeds' 18.1: acc.sg.m.
šiiāoθnāuuarəzəm
- ha-/ta-** dem.pron. 'this' 22.2: nom.sg.m. *hō*,
nom.sg.n. *taṭ*, acc.sg.m. *təm* (OAv.), acc.sg.f.
təm, nom.du.m. *tā-ciṭ* (*tā*), nom.pl.m. *tē*, *tōi*
(OAv.), inst.pl.m. *tāiš*
- haomauuənt-** 'with haoma' 18.3: dat.abl.pl.f.
haomauuəntibūō
- haiθiia-** 'truthful' 19.1/2: nom.sg.m. *haiθiūō*
- hauua-** 'own' 22.4: gen.sg.m. *hauuahe-ca*
- hauuapəṅha-** (OAv.) 'skillfulness' 19.1: inst.pl.
hauuapəṅhāiš
- hacā** (OAv.): posp. + gen.abl. '(outside) of,
from; according to; together with' 23.24
- haca-** 'follow' 32.4: nom.sg.m. of pres.part.
hacimnō
- hapta** 'seven' 21.1
- hāu** → *auua-*
- hāθrō.masah-** 'a *hāθra* in length' 18.7:
acc.sg.m. *hāθrō.masəṅhəm*
- həm** adv. 'together' 23.27
- hē** → *i-/h-*
- hō** → *ha-/ta-*
- hōi** → *i-/h-*
- hiiaṭ** (OAv.) 'that, because, since, when' 37.3
- hišta-** 'stand': 3.pl.pres.mid.ind. *hištənte*
- hīm** → *i-/h-*
- huuar-** n. 'sun' 18.6: gen.sg. *x'əṅg* (OAv.)
- huuō** → *auua-*
- hunairiāṅk-** 'dextrous' 18.2: gen.sg.m.
hunairiāṅcō
- hunara-** m. 'skill' 19.1: gen.pl. *hunaranəm*,
inst.sg. *hunarā*

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Avestan (131), Old Church Slavic (149), Old English (149), Gothic (149), Greek (149), Hittite (150), Old Irish (150), Latin (150), Lithuanian (151), Oscan (151), Pāli (151), Old Persian (151), Prākṛit (151), Proto-Indo-European (151), Proto-Indo-Iranian (153), Sanskrit (153), Umbrian (158). Words are indicated by section numbers, footnotes are preceded by the number of the chapter in which they occur. For instance, fn. 2.1 = footnote 1 in chapter 2, etc.

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